Using Technology to Overcome Barriers to the Accreditation of Prior Experiential Learning (APEL)

Thesis

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Abstract

There is an extensive range of positive rhetoric concerning the Accreditation of Prior Experiential Learning (APEL) and its many benefits for awarding credit in recognition of one's experience. However, it still remains very much a marginal activity within many institutions. This study investigates the nature of any existing barriers to the greater take-up of APEL and explores whether technology could play some part in overcoming them.

The existence and nature of barriers to wider APEL take-up is under-represented in the literature. This action research study uses qualitative methods to develop a case study within a single UK college of further and higher education. The research design included a focus group for student feedback, semi-structured interviews for staff feedback and the development and testing of a technology solution comprising a website and software application.

The study found clear evidence of the existence of a range of barriers affecting the wider uptake of APEL and established several ways in which the technology used did help or could help overcome these barriers. The role of the tutor within the APEL process is of great importance, whether the system used is paper-based or technology based, and further training and support were found to be necessary to ensure that all staff were consistent in the application of the APEL process.

Although this is a small-scale study in a single institution, it is typical of other institutions. Further research into the wider range of barriers identified and further development of appropriate technology solutions could help a larger proportion of people in employment to gain credit for the skills and knowledge they have developed through their work, as they seek to complement their practical experience with formal education and gain recognition for this experience though an institution's APEL process.

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List of Abbreviations and Acronyms

ACE	American Council on Education
AEI	Adult Education Initiative
ALT	Association of Learning Technologies
APEL	Accreditation of Prior Experiential Learning
APL	Accreditation of Prior Learning
AQF	Australian Qualifications Framework
CAEL	Cooperative Assessment of Experiential Learning and later Council for Adult Experiential Learning
CAPLA	Canadian Association for Prior Learning and Assessment
CASE	Commission on Accreditation of Services Experiences
CAT	Credit Accumulation and Transfer
CECC	Commission of Educational Credit Credentials
CEDEFOP	European Centre for the Development of Vocational Training
CIRL	Canadian Institute for Recognising Learning
CLEP	College Level Exam Program
CNAA	Council for National Academic Awards
CPD	Continuing Professional Development
EHEA	European Higher Education Area
ETS	Educational Testing Service
FEC	Further Education College
HE	Higher Education
HEI	Higher Education Institution

JISC	Joint Information Systems Committee
LET	Learning from Experience Trust
NUCCAT	Northern Universities Consortium for Credit Accumulation and Transfer
NVQ	National Vocational Qualification
OECC	Office on Educational Credit and Credentials
OECD	Organisation for Economic Cooperation and Development
PLA	Prior Learning Assessment
PLAR	Prior Learning Assessment and Recognition
QAA	The Quality Assurance Agency
RPL	Recognition of Prior Learning
SAQA	South African Qualifications Authority
SEEC/SEECAT	The South-East England Consortium for Credit Accumulation and Transfer
SweSAT	Swedish Scholastic Aptitude Test
UCAS	The Universities and Colleges Admissions Service
UoDC	University of Derby Corporate
Ufi	University for Industry
VET	Vocational Education and Training
VNFIL	Validation of Non-Formal and Informal Learning

Glossary

APEL	Accreditation of Prior Experiential Learning A process through which learning achieved outside education or training systems is assessed and recognised for academic purposes. This recognition may allow the learning to be counted towards the completion of a programme of study and the award(s) or qualifications associated with it.
Case Study	A process or record of research into the development of a particular person, group or situation over a period of time.
Cautious Adopter	Someone taking more time to be convinced of the possibilities of technology based solutions to managing APEL.
Early Adopter	Someone keener to explore the possibilities of technology based solutions to managing APEL.
Experiential Learning	The process of learning through experience, and more specifically defined as learning through reflection on doing.
Gamification	The application of game elements to non-game contexts to increase user interaction, engagement and immersion with the aim of leading to good learning.
Learndirect	The brand name for learning created by the University for Industry in 2000; now owned by Lloyds Development Capital.
LET	The Learning from Experience Trust An organisation focusing on the recognition of learning from experience.
NUCCAT	Northern Universities Consortium for Credit Accumulation and Transfer. It provides a forum for higher education practitioners with an interest in the design, implementation and regulation of credit-based curriculum and its implications for the student experience and progression, reflecting the changing dynamics of the sector.

OECD	Organisation for Economic Cooperation and Development A forum where the governments of 104 countries work with each other to promote economic growth, prosperity, and sustainable development.
Persuasive Technology	Technology that is designed to change attitudes or behaviours of the users through persuasion and social influence, but not through coercion.
QAA	The Quality Assurance Agency for Higher Education (QAA) is an independent body that checks on standards and quality in UK higher education. It conducts quality assessment reviews, develops reference points and guidance for providers, and conducts or commissions research on relevant issues.
RPL	Recognition of Prior Learning A process for recognising learning that has come from experience and/or previous formal, non-formal and informal learning, by evaluating it against a given set of standards, competencies or learning outcomes.
SEEC	The South-East England Consortium for Credit Accumulation and Transfer A consortium of universities and HE providers working together to advance the use and practice of academic credit, widening access to learning.
Thematic Analysis	A qualitative data analysis method which focuses on identifying patterned meaning across a dataset.
Ufi	University for Industry Created in 1998 to take forward the Government's stated vision of a University for Industry; now a charitable trust.

Chapter 1 Introduction

Introduction

This chapter provides an outline of the focus of my research. In particular, it:

- explains the background of the research
- describes the aims, research questions and research design
- outlines the structure of the thesis.

Background to the Research

When I conducted this research, I was the director of e-learning at a large college of Further and Higher Education in the north-east of England. My role involved the design and development of technology enhanced learning interventions in all areas of the college and almost all areas of teaching. These interventions included the development of online courses and the development of technology to support online learning with the key aims of improving student experience, retention and achievement.

My interest in the Recognition of Prior Learning (RPL) and, in particular, the Accreditation of Prior Experiential Learning (APEL) stems from many years of working within work-based and vocational learning, primarily in Further Education settings but also within Higher Education and Private Training Provision. My concern is that individuals should be able to gain academic credit for the learning they undertake in the workplace and that the availability of opportunities to attain such credit should be offered as systematically as the courses through which the

same credit can be gained. Johnsson and Hager (2008, p.526) argue that workplace learning is a process and should be viewed as 'embodied construction' rather than the more static metaphors of acquisition and participation (Sfard, 1998). In this way, the workplace is viewed as a learning environment through which one is constantly learning.

'Work-based learning for academic credit' (Evans, 1993, p.175) was developed in the UK in the 1980s to 'respond to rapid change in social and economic …educational life' (Strachan et al. 2011). It has been widely discussed (Boud and Solomon, 2001) that Work-based Learning has the power to bring universities and employers together to create new learning opportunities and meet the Continuing Professional Development (CPD) needs of learners. APEL has the power to bring down costs and increase the flexibility of programmes (Boud and Solomon, 2001) and there has been particular debate around widening participation and attracting employers and employees to Higher Education by using APEL. That said, there is little evidence to suggest this is actually happening in practice on any widespread level. Scott (2010, p.19) points to an overall 'paucity' in the extent and level of evidence as a possible factor. However, learning through work (Stephenson and Saxton, 2004) is often tacit and acquired without awareness or recognition (Polyani, 1967), the extraction of this learning may be too difficult or time-consuming for the student as opposed to just attending the classes that teach these things.

The concepts of RPL and APEL are well known in education for the validation of competence (Haldane and Wallace, 2009). There appear to be many parallels between the assessment of experiential evidence to demonstrate competence within National Vocational Qualification (NVQ) programmes and the assessment of experiential evidence to support claims for Higher Education credit. Both of these assessment methods require written statements from the student to describe how the evidence is creditworthy. In the case of NVQs, these statements are linked to performance criteria set by the awarding body, whereas in Higher Education they are linked to the learning outcomes of the module. In both cases, a qualified assessor determines whether the evidence and supporting statements meet the assessment criteria. However, in practice in my experience, the opportunities afforded to individuals to successfully achieve Higher Education credit do not seem to be offered in any systematic way and this study investigates the reasons for this.

Prior to carrying out my main research, I conducted an initial telephone survey of 40 Higher Education Institutions and six Further Education Colleges in England during October 2011, to gain an initial understanding of how APEL was offered to students (referred to in Chapter 4 as Stage 1 of the Preliminary Research). This revealed that there was little or no uniformity of processes or systems for APEL among any of those institutions questioned. Each organisation contacted had a different approach and charging policy and the information varied widely between enquiries. Some organisations appeared to know little or nothing about APEL at

all whilst others knew little about the process or cost. Only one organisation seemed to have a well-established organisational approach.

There is some existing research into the benefits of APEL, particularly regarding the reduction of cost and time of learning programmes, which will be covered in more detail in my literature review. There does seem, however, to be great deal of rhetoric too, with the benefits of APEL much extolled but little evidence of any widespread use of systematic processes in the adoption of it in the UK. Notable UK exceptions to this are University for Industry (Ufi), with Learning through Work, and Estimator from University of Derby Corporate (UoDC).

Learning through Work was first developed by Ufi in 2003 and comprised a process through which partner universities could use an online system to host APEL evidence which could then be assessed by an appropriate tutor. This was extended to include negotiated learning contracts which, in effect, used APEL on an ongoing basis through learning which took place on the job. This was a relatively successful programme generating some 2000 students per year for the partner universities. Ufi however shelved the programme in 2010 when it decided to sell *learndirect*.

University of Derby Corporate were funded by Joint Information Systems Committee (JISC) to develop an online APEL system. This system was developed to provide the basis for potential students to estimate their likely APEL claim. Tutors could then use their own version of the system to validate evidence

and produce a claim for the APEL board. The project completed with the development of a prototype system (the source code of which is available via JISC) but this has not been developed into a fully working system.

In 2002 whilst working for Ufi, I had the opportunity to work on the Learning through Work Project and I went on to lead it until 2010 when I joined a college of Further and Higher Education in an urban area in the north-east of England. My interest in APEL continued in this new role in which I was heavily involved in the development of online learning for Higher Education provision. Through this work and in discussions with colleagues and students, there seemed to be some demand for APEL. However, the general process of making an APEL claim often involved the collation of large volumes of paper-based documentation which were assessed by relevant tutorial staff following various consultations with students. This together with the claims procedure and approvals process were time-consuming for both the student and the staff member and I considered these could be significant barriers to the more widespread use of APEL alongside other forms of assessment.

At the college of Further and Higher Education where I worked, the process of APEL was most often conducted as a post-enrolment activity. The identification of students with the potential for APEL claims was a largely *ad hoc* activity and left to individual lecturers to make these determinations during the first few weeks of the course. Such an approach has the potential to fail to identify all of the students with potential claims and, for those that are identified, the result is often

(as is possible in the other institutions) that students start their programme, then find out about APEL and make a successful claim, only to find out there are modules or units that they need not have started as they could have received APEL for them. Having a systematic process through which students with potential APEL claims are identified prior to enrolment could potentially alleviate this problem.

As director of e-learning and as an educational practitioner involved in APEL and with a keen interest in technology enhanced learning, I was concerned that these issues and barriers could have an impact on student satisfaction, retention and achievement and I wanted to investigate how technology may be harnessed to overcome them. 'Technology is one solution to overcoming the increasing access to "opportunity lost" and "demand driven" students', (Strachan et al. 2011, np) and my experience led me to postulate that if technology were harnessed in an appropriate way, APEL could be attractive to potential students, more marketable as a recruitment tool, more easily understood by all stakeholders and more easily managed.

Aims, Research Questions and Research Design

The initial telephone survey revealed a wide variety of responses to the availability and use of APEL among those contacted and a general lack of knowledge and understanding of the concept of APEL. This made it clear to me that there was a need to further investigate issues surrounding the use of APEL. In a context in which APEL is widely discussed (e.g. Evans, 1998, Boud and

Solomon, 2001, Scott, 2010) as having significant benefits, by increasing flexibility and reducing both the time needed to complete a programme and the overall costs to the institution and the student, I wanted to understand why its adoption is not greater.

The main aim of this research project is to gain a better understanding of the perspectives of key stakeholders (e.g. students and tutors) of APEL and of the effectiveness of RPL and APEL supporting technology in addressing their potential concerns. In order to achieve this aim, the following research questions were selected:

1) What are the barriers to APEL adoption?
2) How could technology help to overcome any potential barriers?
3) How effective is the prototype software application I created in overcoming potential barriers?

To successfully address these questions, it was necessary to understand the individual perspectives of those within the college who had some role to play in the use of APEL, as I wanted to understand the underlying reasons for their non-adoption. My assertion was that quantitative methods could not provide the richness of data I believed necessary to fully understand these reasons. The qualitative methods within the interpretivist paradigm are compatible with my aim and were therefore adopted. Interpretivist epistemology (Livesey, 2006) prefers the researcher to be immersed within the setting preferably interpreting life

through the eyes of those being observed. I planned to achieve this using action research to modify the design as the research progressed as follows:

Initial telephone survey:	To provide information on the extent to which Higher Education Institutions currently offer APEL (see earlier discussion).
Preliminary Research:	The aim was to collect qualitative data from staff in the form of semi-structured interviews about their attitudes towards APEL and to potentially identify their barriers and perceptions towards this. Thematic analysis (Braun and Clarke, 2006) was the main form of analysis at this point and was used to generate categories for further investigation in the Pilot Research and the Main Research Study.

Pilot Research:	Using the categories developed through the Preliminary Research, I conducted focus group sessions with students as well as meetings and interviews with staff to validate the barriers identified (and identify more). I then used the output from these sessions to inform the design and testing of the software application and APEL process to be used in the main research study. The testing involved prospective APEL students from the focus group accessing the prototype software application and following the prototype APEL process as though they were conducting an APEL claim. Further focus group sessions and interviews with staff were conducted after this exercise to gain their feedback in order to inform the design of the Main Research Study.
Main Research Study:	Students and staff were then invited to conduct their APEL claims via the new software application and APEL process. Finally, through a final set of focus groups and interviews, thematic analysis of the data was used to determine the extent to which, how and whether a technological solution was able to help overcome the previously identified barriers.

Although limited to a single institution, given the potential desirability of a more widespread approach to APEL as outlined earlier and having discussed this technological solution at several events, I was expecting there to be significant interest in the outcomes of the research among the wider Further and Higher Education community.

The Structure of the Thesis

This thesis is presented in nine chapters. After this initial introductory chapter, Chapter 2 presents a review of the literature concerning APEL. Within this, I was particularly keen to know what the literature has to say about the benefits of APEL, how APEL should be carried out, and whether barriers have been identified to its more widespread adoption. The chapter begins with an outline of experiential learning and its relationship with APEL followed by a chronology of the evolution of APEL internationally and in the UK. The literature concerning benefits of and barriers to APEL is then discussed followed by a review of the literature on technology used in APEL.

Chapter 3 focuses on the main research design and theoretical framework within which the data were gathered and analysed. This is followed by a description in Chapter 4 of the preliminary and pilot research carried out prior to the main research study. These were essential steps in informing the final research design, which is described, together with the data analysis strategy, in Chapter 5.

Chapters 6, 7 and 8 relate to the findings. Chapter 6 details the findings from the data collected from semi-structured interviews with staff involved in the Main Research Study and Chapter 7 focuses on the findings of the data collected from students via the focus group. This leads on to the discussion chapter (Chapter 8) which compares and contrasts the findings between the staff and students, outlines key differences and similarities and suggests potential reasons for these.

Finally, Chapter 9 draws conclusions from the findings and their implications for APEL, the potential for technology in overcoming the barriers I identified and the need for further research into this area.

Chapter 2 Literature Review

Introduction

In the previous chapter, I described my research as being focused on two main areas: 1) the potential barriers which may exist to the widespread adoption of APEL, and 2) the potential disconnect between the *rhetoric*, which describes APEL as having significant potential for the student, and the *reality*, which appears to be somewhat different in terms of its general adoption. In this chapter, my focus is on contrasting the literature concerning the benefits of APEL with the literature more critical of APEL, in order to identify implications for my research.

To achieve this, I will:

- explain the reviewing process
- provide an overview of experiential learning theory and its relationship to APEL
- examine the development of APEL internationally
- examine the development of APEL in the UK from its beginnings in the 1980s to the present day, and determine why APEL is of such concern as an academic process
- describe the benefits of APEL
- investigate the criticisms of and barriers to APEL
- provide a brief overview of the technology used in APEL
- identify implications for research.

The Reviewing Process

The reviewing process followed a traditional review method through which I identified a number of initial keywords pertinent to the focus of the research. These were used in an early attempt to estimate the volume of previous research into the subject. I then refined these keywords to try to limit the research.

The Open University Library provided a number of useful tools to assist the Literature Review process, including a One-Stop Shop facility which searches a wide range of journals, books and other sources. It was necessary, however, to revert to using advanced searches, as the One-Stop Shop produced many thousands of returns based on my search criteria. The results of these criteria are in Appendix 1 of this report.

I also used the Association of Learning Technologies (ALT) database. ALT conduct and sponsor a wide range of research in the area of technology enhanced learning and work in partnership with the Joint Information Systems Committee (JISC), a UK Government agency with the role of sponsoring projects within this area. My hope here was that there might be projects within, or aligned to, my research focus which, although not necessarily peer-reviewed articles, would offer insight into work which may already have been carried out.

Overview of Experiential Learning and its Relationship to APEL

The modern theory of experiential learning was developed in the 1970s by David Kolb (1976) who draws heavily on the work of other eminent theorists such as Dewey, Piaget and Lewin. It is extremely difficult to pinpoint exactly who developed the original theories of experiential learning as we can even trace the concept back to Aristotle who, in around 350BC, wrote in the *Nichomachean Ethics* 'for the things we have to learn before we do them, we learn by doing them'.

All the proponents mentioned above seem to agree, however, that the general concept is that experiential learning is a more participatory and active form of learning, distinct from more didactic models where the learner is a more passive receiver of knowledge. Experiential learning theorists agree that the learning aspect comes from reflection on the experience rather than the experience itself (Dewey 1938, Kolb 1984, Moon, 2004).

Kolb's (1984) model for experiential learning focuses on the individual learner. He treats the process of learning as a process with four key stages, namely: concrete experience, reflective observation, abstract conceptualisation and active experimentation. In this model, the learner must initially physically experience something and have the opportunity to reflect on what worked and what did not. One example of this could be a new manager carrying out an appraisal for the first time. Although the manager may have been taught the policy and procedure of the appraisal, only by doing it will they be able to experience it and determine

(through reflection) what worked and what did not work. Abstract conceptualisation is the process of thinking about ways one can improve on the next attempt. Active experimentation is the enactment of the cycle of experience, reflection and thought (Kolb, 1984).

Kolb (1984) states that, in order to gain genuine knowledge from an experience, the learner must have four abilities:

- 'The learner must be willing to be actively involved in the experience
- The learner must be able to reflect on the experience
- The learner must possess and use analytical skills to conceptualize the experience, and
- The learner must possess decision making and problem-solving skills in order to use the new ideas gained from the experience'.

Moon (2004, p.126) develops this further to argue that experiential learning is most effective when it involves:

- 'a reflective learning phase
- a phase of learning resulting from the actions inherent to experiential learning
- a further phase of learning from feedback'

This process of learning can result in 'changes in judgment, feeling or skills' for the individual and can provide direction for the 'making of judgments as a guide to choice and action' (Moon, 2005, p.15).

Lindsay and Berger (2009, p.117) further develop the Kolb model, describing experiential learning as having the following characteristics:

- The method of instruction is ‘probabilistic rather than deterministic’
- This method is ‘learner-centred vs. teacher-centred’. This means that the curriculum gives learners an opportunity to engage in the curriculum and the students play an ‘active’ role in the process and the outcomes developed for the course
- The curriculum tends to focus on ‘real world’ problems or skills needed when the student goes out into the world of work
- Teachers act as facilitators
- Collaboration and cooperation are encouraged in learning
- Experiential learning offers the opportunity to prepare for real life and work situations.

Although Kolb’s (1984) original four-stage model has been further adapted over the years, the original concepts remain true i.e. that iterative reflection is a crucial part of the experiential learning process. As Dewey (1938, p.17) says, ‘successive portions of reflective thought grow out of one another and support one another’, creating a scaffold for further learning, and allowing for further experiences and reflection. This reinforces the fact that experiential learning and reflective learning are iterative processes and the learning builds and develops with further reflection and experience.

Kolb's theory also stresses the importance of good facilitation within the experiential learning process. Whilst the learning is acquired by the learner, 'a skilled facilitator, asking the right questions and guiding reflective conversation before, during and after an experience, can help open a gateway to powerful new thinking and learning' (Jacobson and Ruddy, 2004, p.2).

It is possible to draw direct comparisons between the concepts of experiential learning, as described above, and the process of making an APEL claim. In both cases, the reflection on learning is a critical feature. Within the APEL process, the learner must reflect on the experience that they believe can contribute towards their claim for academic credit. The reflection on this prior learning and how the learner sees this as meeting the criteria for the qualification are hugely important. A good facilitator will guide the learner to reflect on the experience and provide them with support when making their claim.

International Developments

The purpose of this section is to outline parallel developments taking place in other countries over the same period that APEL was developing in the UK. This will provide useful comparisons between policy and practice in the UK and the other countries and offer additional insight into potential barriers to APEL.

It is not possible to provide a full chronology for every country where APEL has developed so I have focused on countries or regions where there has been a significant policy of promoting APEL, namely: the USA, Australia, Canada, the

European Union (EU), Sweden and South Africa. Together, these provide a very good representation of the ways in which APEL has developed around the world.

The USA

In the USA, APEL is more commonly known as Prior Learning Assessment (PLA), with the earliest recognised forms emerging in 1945. The Office on Educational Credit and Credentials (OECC) of the American Council on Education developed a programme which evaluated military experience for college-level learning (American Council on Education, 1981). In 1974, the OECC and the Commission on Accreditation of Services Experiences merged to become the Commission of Educational Credit Credentials and provided services to institutions to help them determine 'appropriate credit awards for extra-institutional learning' (American Council on Education, 1981, p.4).

Between 1947 and 1967, a number of organisations developed exams-based systems to access university-level learning, the most widely used of which was the College Level Exam Program (Cargo, 1982). Although these efforts focused on the legitimisation of the assessment of prior learning through the formal means, they did help to forge early acceptance of college-level PLA (Travers et al. 2011). In 1971, the Commission on Non-Traditional Learning was established with funding from the Carnegie Corporation and the Educational Foundation of America, with sponsorship from the Educational Testing Service (ETS) and the College Board (Bamford-Rees, 2008). The aim of the Commission was to examine then practices in non-traditional education. The main recommendation

was that ‘new devices and techniques should be perfected to measure the outcomes of non-traditional students and to assess the educative efforts of work experience and community service’ (Bamford-Rees, 2008, p.3).

The Cooperative Assessment of Experiential Learning Project (CAEL) was launched in 1974 based on the above work under the auspices of the ETS. However, in 1977, CAEL separated from ETS to become a not-for-profit organisation. It then changed its name to the Council for the Advancement of Experiential Learning and subsequently to the Council for Adult Experiential Learning (CAEL), with the aim of providing colleges and universities with the tools and strategies for creating practical and effective lifelong learning solutions (Travers, 2011). CAEL then began its first efforts into establishing a common framework for assessing learning from experience in a disciplined and quality way (Gamson, 1991).

Between 1968 and 1974, a time of great upheaval in the Higher Education (HE) arena, 13 new colleges were established which had some form of PLA as part of the institutional offer (Keeton, 2002). These institutions were beginning to realise the legitimacy of learning outside of the classroom at a time when PLA was also becoming a significant part of an educational social justice movement (Gamson, 1991).

After the split with the ETS in 1977, CAEL continued its sponsorship and research into the PLA agenda and saw the development of the CAEL Handbook

Expert Assessment of Experiential Learning (Willingham, 1997), which was subsequently revised in 1989 to become *Assessing Learning: Standards, Principles and Procedures* (Whitaker, 1989) and again in 2006 by Fiddler et al. From this point onwards, CAEL became the leading organisation in the US to sponsor RPL research, support workforce development and provide annual conferences to disseminate the latest research findings and practice.

Australia

RPL was officially introduced in the early 1990s as part of larger educational reforms that led to the Australian Qualifications Framework (AQF). Prior to this, the Vocational Education and Training (VET) sector had developed several projects such as the Ford/TAFE (Technical and Further Education) Articulation Project in 1987, which influenced the speed and direction (Cameron, 2011) of policy, with mixed success.

Smith (2008) argued that RPL was introduced too quickly into the VET sector and became national policy before it could have become widely understood as an educational process. Cameron (2011) argues that early efforts to engage in critical theoretical analysis and discussion of practice were soon swamped by a plethora of research mainly focused on RPL implementation.

RPL is now a standard requirement of any accredited training within the AQF, which places school-level, work-based and academic qualifications within a single framework. In 2004, the AQF Advisory Board endorsed the National

Principles and Operating Guidelines for RPL, and in 2009 the government formally adopted the AQF National Policy and Guidelines on Credit Arrangements. Within the new framework, RPL is reconceptualised as an assessment and credit process.

The year 2003 marked a watershed (Cameron, 2011) with the publication of three major reports into RPL. The first, *Recognition of Prior Learning, Policy and Practice in Australia*, by Wheelahan et al. (2003), paved the way for the development of the National Principles and Operational Guidelines for Recognition of Prior Learning (Australian Qualifications Framework Advisory Board, 2004). The second, by Bowman et al. (2003), entitled, *Recognition of Prior Learning in the Vocational Education and Training Sector*, examined drivers and barriers to the effective implementation of RPL within the VET sector. The final report, *Giving Credit: A Review of RPL and Credit Transfer in the Vocational Education and Training Sector, 1995 to 2001* (Bateman and Knight, 2003), examined RPL and credit transfer in Australia. These reports drew together the accumulated knowledge of the time to create a 'solid basis for future developments in policy, practice and research' in this area (Cameron, 2008, p.9). Since then, there has been a 'slow stream' (Cameron, 2011, p.22) of RPL research reflected perhaps by the 'small Australian research community' (Cameron, 2011, p.23).

Pitman (2009) found that of 38 universities sampled, 29 accepted RPL but that RPL uptake was low and had not reached expectations (Cameron, 2011).

Although RPL is mandatory in the VET sector, it has not been universally embraced by the Higher Education sector in Australia (Cameron, 2011). Pitman (2009, p.29) points to an unwillingness among universities to 'facilitate a process for which they feel no ownership' and observes that there is often a discrepancy between stated policy and what is actually implemented on the ground (Cameron, 2011).

Canada

RPL is an umbrella term (Conrad, 2008) used in Canada to describe qualification recognition (assessment of credentials), credit recognition (the granting of credit based on equivalent competencies), Prior Learning Assessment and Recognition (PLAR), and the assessment of experiential learning, Saskatchewan Labour Force Development Board (SLFDB, 2002, Dyson and Keating, 2005). The term RPL/PLAR is presently the most commonly used term to describe RPL in Canada.

Responsibility for education is devolved to each of Canada's ten provinces and three territories but, until the early 2000s, responsibility for skills development remained at federal (central) government level. The natural overlaps between these two areas were a source of competitive tension whenever the federal government embarked on initiatives which were viewed by the provinces as matters of education (Van Kleef, 2011).

Early developments (i.e. prior to 1994) were very much a practitioner-led movement (Kennedy, 2016) from those in the educational community who had become familiar with developments in the US (CAEL) and sought to being these practices to their own areas (Van Kleef, 2011). From 1994 at the time PLAR was emerging, the federal government signalled its support by initiating federal policy development and funding the first of several national conferences. The early focus of PLAR was on implementation within existing systems of education, professional regulation and employment. In the same year, the Canadian Association for Prior Learning and Assessment (CAPLA) was formed. Incorporated in 1997, CAPLA continues to operate as a not-for-profit organisation, with members from all areas of practice and policy development (CAPLA, 2017).

Each province and territory has developed its own set of PLAR standards, policies, procedures and programmes, designed to meet local conditions. Whilst this arrangement leads to systems that are responsive to the needs of learners, it does mean that opportunities for ensuring transferability and/or portability of credentials are always present. This issue is highlighted when considering the portability of credentials related to the licensing and registration of occupations. Accredited training occurs in colleges and universities, and there is some progress towards the development of outcomes-based curricula, particularly in community colleges. This work, driven by the need to have clear and measurable benchmarks for assessment, takes place at programme level, but the activity is not systemic. College curricula are not consistent across colleges, but credit

transfer is available within, and often between, provinces (Dyson and Keating, 2005).

By 1992, PLAR was present in most of Canada's public colleges, which used a relatively consistent credit exchange (Butterworth, 1992) for PLAR. University take-up, however, was much slower, with most reported being resistant (Blinkhorn, 1999, Nesbit et al. 2007, Peruniak, 2007). In 2006, a survey by the Association of Universities and Colleges of Canada (AUCC, 2006) reported that out of 40 respondents only 11 reported that they were using PLAR. A survey of 115 institutions by the Canadian Institute for Recognising Learning found no change with assessments conducted by only 11 universities (Van Kleef, 2009). Sources of resistance include concerns about the quality of prior learning (Fergusson, 1998, Bloom and Watr, 2001, Shandro, 2006), the purpose of a university education (Blinkhorn, 1999, Nesbit et al. 2007) and relinquishing control over what learning should count towards an academic credential (Thomas, 2000).

Despite the constitutional limitations on the extent to which federal government could provide leadership, it continued to find ways to do so under the auspices of labour force development. Thomas (2000) referred to these as benign and enabling projects which were much more rhetoric than having any lasting effect. In 2005, the federal government stopped funding national PLAR conferences and in 2006 it terminated all funding, coinciding with its devolution of labour force development to the provinces.

In summary, PLAR has developed a public policy and institutional presence in Canada, particularly as a labour force development tool. Constitutional dimensions have contributed to its slow growth and fragmented nature across the country but significant efforts by the PLAR 'movement' (CAPLA, np) have ensured its ongoing development.

The European Union

In EU policy circles, the assessment and recognition of prior learning is increasingly referred to as the Validation of Non-Formal and Informal Learning (VNFIL) (Harris, 2011) and there has been a strong EU policy focus on skills recognition since at least 1995 when the then European Commission published its white paper *Teaching and Learning: Towards a Learning Society* (European Union, 1995).

The overarching vision of the EU is for Europe to become the world's most dynamic knowledge-based economy (Lisbon European Council, 2000) in which education is conceptualised as integral to social and economic policy. The Bologna process (Bologna, 1999) was established in 1999 to oversee the realisation of a European Higher Education Area by 2010 and has exerted far-reaching changes to the structure, content and conduct of Higher Education (Adam, 2008) and professional recognition (Harris, 2011).

Although the EU does not have any direct influence over individual nation state educational policy and implementation, it has been very active in promoting RPL through numerous communiqués, for example the Communiqués of Berlin (Bologna, 2003), Bergen (Bologna, 2005), London (Bologna, 2007) and Leuven and Louvain-la-Neuve (Bologna, 2009), which all stressed the contribution that RPL can make to lifelong learning at Higher Education level.

Alongside the more political interventions described above, the EU has conducted a wide range of development activities, many of which have a research dimension. The most notable is the development of inventories under the auspices of the European Centre for the Development of Vocational Training (CEDEFOP), (Harris, 2011). The first inventory, *Making Learning Visible: Identification, Assessment and Recognition of Non-Formal Learning in Europe,* was published in 2000 by Jens Bjørnåvold. It used a combination of questionnaires, desk research, policy and statistical analysis to produce a comparison of policy and practice of countries within the EU, hence the term inventory. The following year, the EU and CEDEFOP formally established a European inventory of approaches to VNFIL in order to catalogue policy, practice and methodology among member states and to observe emerging trends. Inventories have been published every two years, with the latest being in 2016. The main findings and challenges of the 2016 inventory are that member states are 'gradually placing validation of non-formal learning and informal learning high on their policy agendas' (Harris, 2011, p.18). Whilst all countries state that they offer such validation opportunities, this is not widespread across all sectors within

countries, and there is still considerable diversity and fragmentation of practices. Data on actual take-up remain poor and, of those data which do exist, participation remains low. CEDEFOP (2016, p.19) calls for 'decisive action' to meet 2012 council recommendation principles in a number of areas.

A number of comparative studies (Gallacher and Feurie, 2003, Pouget and Osborne, 2004, Corradi et al. 2006) were published during the same period but on a much smaller scale. Corradi et al. (2006, p.8) point to a 'motley collection of practices', whereas Gallacher and Feurie (2003) observed problems with complexity and formality in which achievements have been limited due to the problems associated with accrediting different kinds on knowledge.

Sweden

The concept of RPL (or *validering*) in Sweden formally emerged from around 1996 as a consequence of developing policy in this area (Andersson and Fejes, 2011), although versions of similar concepts can be found further back in Swedish history.

Initiatives during the 1970s to widen access to Higher Education were based on more general recognition of work/life experience via 1) the 25:4 (originally 25:5) scheme, and 2) the general Swedish Scholastic Aptitude Test (SweSAT) (Andersson and Fejes, 2011). This test differed from systems used in the US at the same time where the focus was more competence-based (Abrahamsson, 1989). The 25:4 was available to those aged 25 and over with four years' work

experience. ‘Experience is construed as competence in a general way, independent of what the person has done during these years’ (Andersson and Fejes, 2011, p.3) therefore the ‘experience was valued on a general and collective level’ (Andersson and Fejes, 2011, p.3).

There is a policy gap until the national Adult Education Initiative, which ran from 1997 to 2002. This focused on the renewal and restructuring of Swedish adult education, resulting in two reports (Ministry of Education, 1998 and 2001) which included a specific focus on validation as a core principle (Beach and Carlson, 2004, Andersson and Fejes, 2011). At the same time, the Bill on Adult Learning and the Future Development of Adult Education (2001) made explicit reference to the fact that any resident in Sweden should be able to have their knowledge and competences validated. In 2003, the Bill on Validation (Ministry of Education, 2003) stated that more time should be given to pilot projects and to further discussion before deciding on regulations and passing acts. As a result, in December 2003, the Swedish government appointed the Swedish National Commission on Validation (*Valideringsdelegationen*) for the period 2004–2007 to promote and further develop validation methods and enhance (regional) cooperation. The Ministry of Education (2003) also published guidelines for the development of validation in Sweden, but this did not extend to Higher Education (Andersson and Fejes, 2011).

The CEDEFOP inventories of 2010 and 2014 described little difference in Swedish policy, with the main focus continuing to be on validation, with little focus

being on RPL and Higher Education, and with the Swedish National Agency for Higher Vocational Education (*Myndigheten för yrkeshögskolan*) having the task of coordinating and supporting the national structure for validation of prior learning from 2010.

Validation continues to be a major focus of Swedish education policy (CEDEFOP, 2016). It will continue to be the dominant theme, aided by significant government funding (Budget Bill, 2015) and the appointment of a national Delegation for Validation from 2015 to 2019, which comprises 15 members representing trade unions, employers' associations and national authorities. The Delegation's main task is to follow, support and urge on a coordinated work to develop validation on both a regional and national level.

South Africa

It is generally accepted that RPL in South Africa emerged during the 1990s (Breier, 2011) primarily as a result of initiatives by trade unions and workplace trainers on various National Training Boards and was based on models within the UK and Australia (Mukora, 2010). During this period, RPL was adopted as one of the 13 principles of the South African National Qualifications Framework and the *White Paper on Education and Training* (Republic of South Africa, (RSA), 1995) presented RPL as one of the bases of an integrated approach to education and training. This placed RPL at the heart of political strategy to 'open doors of opportunity which have been needlessly blocked because their prior knowledge

… has not been assessed and certified' (RSA, 1995, p.3) and resonated with the earlier rhetoric of the trade unions.

The subsequent *White Paper on Higher Education* (RSA, 1997) placed greater emphasis on RPL as a means of achieving both vertical and horizontal mobility within the Higher Education system (Breier, 2011). RPL was formally adopted in 1998, when the South African Qualifications Authority (SAQA) stipulated that all qualifications may be achieved either wholly or in part through RPL.

Although RPL was implemented with some success in the workplace and vocational education, it was initially met with reluctance by Higher Education Institutions during the late 1990s (Breier, 2011). By the year 2000, only four institutions had developed any form of written policy on RPL, with a further three in draft, and only 250 students had been granted access to undergraduate programmes on an RPL basis (Breier and Osman, 2000). By 2003, of the 21 universities and 14 technikons that existed, 16 had formally adopted RPL into their policy, albeit primarily as a route to entry rather than credit (Breier and Burness, 2003). This had resulted in 459 students entering university and 680 into technikons, where RPL was used as a basis for entry (Breier, 2011).

Despite these significant policy developments, however, RPL in South Africa remained very much on the margins of Higher Education throughout the 2000s. This was initially due to some early resistance (Breier and Osman, 2000), though further research suggests the extent of the 'educational backlog' (Breier, 2011

p.213) in the country. Adults with limited formal education showed difficulty with aspects of RPL practice such as abstraction and self-reflection (Hendricks, 2001, Thaver et al. 2002, Frick et al. 2007). In 2008, the Organisation for Economic Cooperation and Development (OECD) reported significant gaps between stated policy and practical implementation (Gunning et al. 2008). Scott (2010, p.20) states that the practical application of policy at practice level 'remains relatively low in relation to its potential'.

The reality of RPL in South Africa was also discussed at the National SAQA RPL Conference (held in Benoni, South Africa, on 23-25 February 2011). This resulted in a national declaration on RPL (SAQA, 2011) that, although the RPL promises of the early 1990s have largely not been fulfilled, there is an ongoing need for a fully-fledged RPL system. Blom (2011) emphasises the need for a new RPL discourse that moves from socio-political matters to a pragmatic approach grounded in educational practice. These discussions contribute to the conceptual understanding of RPL as a notion where policy becomes practice in the implementation at learner level. This implementation needs to be grounded in sound research practices, so a community of RPL scholars has a vital role to play (Harris, 2011).

The Development of APEL in the UK

APEL emerged in the UK during the 1980s, from two bodies of work primarily aimed at increasing the supply of students to Higher Education. Prior to this, any formal discussion on 'accrediting anything other than examined work was hardly on the map' (McKelvey and Peters, 1993, Foreword, np).

The first work stems from Norman Evans of the University of London (Goldsmiths College) in 1979, who recommended the creation of an organisation that focused on the recognition of learning from experience when he was searching for a way of encouraging experienced professionals into teacher education. This led to the establishment of the Learning from Experience Trust, which received charitable status in 1986 with the aims of conducting 'research into ways of developing the concept of experiential learning, promotes its use in education, training, industry, commerce and the public and voluntary sectors' (Learning from Experience Trust, 2016). The development was largely informed by the work of CAEL in the USA.

The second work in the area of APEL in the UK was the development of Credit Accumulation and Transfer (CAT) schemes under the Council for National Academic Awards (CNAA) in 1986 (Evans, 2000). New universities, in particular, were keen to adopt the credit-based model, whose structure was deemed to lend itself to the award of credit for learning from experience (Garnett et al. 2004). The CNAA's introduction of a regulation stating that 'appropriate learning at higher education level, wherever it occurs, provided it can be assessed, can be given credit towards an academic award' (Garnet et al. 2004, p.6) was a

significant development in support of this. Universities, however, were keen to emphasise the difference between APEL as they perceived it, and APEL as practised in further education through the National Vocational Qualification (NVQ) schemes. In her paper *More than one Bite at the APEL*, Butterworth (1992) makes a distinction between a credit exchange model of APEL, in which the skills and knowledge of a learner are ticked off against a list of 'learning outcomes' with the main aim being to acquire credit, and a developmental model, in which learning is derived from experience by means of a reflective process. This latter model is considered by some to be more appropriate in the Higher Education context because it involves ‘personal commitment’ and ‘the development of the mind’ (Trowler, 1996, p.21). APEL is therefore defined as both a means of gaining credit within a CAT system and a developmental learning process. These two components have implications, both for the nature of Higher Education teaching and study, and for recruitment in terms of who comes to university and what happens when they come. By the end of the 1980s, at least 20 polytechnics were active in granting APEL (Learning from Experience Trust, 2015).

In 1985, the South-East England Consortium for Credit Accumulation and Transfer (SEECAT, later shortened to SEEC) was formed and now also draws members from institutions in the South and South Midlands in the UK, hence the need for a modification to their name. The Northern Universities Consortium for Credit Accumulation and Transfer (NUCCAT) is the corresponding consortium for the northern half of the UK, but was established later. SEEC was the first Higher

Education consortium for CAT in the United Kingdom and exists to promote the use of credit for curriculum development and learner achievement. APEL continued to spread throughout the 1990s. In 1994, the Robertson report, *Choosing to Change*, was published and was influential in highlighting the significance of flexible, credit-based programmes to meet the needs of the HE growth agenda at that time. The concept continued to be adopted by more universities.

In 1993, SEEC published *Getting to the Core of APEL* (Storan, 1993), which pulled together a range of good practice from its member organisations at that time and, in 1995, it published a Code of Practice for APEL which was endorsed by 37 Higher Education Institutions. In 1997, a briefing report on APEL by the Universities and Colleges Admissions Service (UCAS) claimed that 'the assessment and accreditation of prior learning is used within a wide range of programmes within Higher Education at both undergraduate and postgraduate levels' (UCAS, 1997).

In the late 1990s, the policy agenda (Dearing, 1997, Fryer, 1997) remained one of increased student numbers and a further emphasis on widening access and learner-centredness. A national survey by the Learning from Experience Trust (Merrifield et al. 2000) provides the most comprehensive picture of APEL provision at the turn of the millennium. The survey included 133 Higher Education Institutions. Of these, 107 replied and 83 (78 per cent of respondents) indicated they had APEL policies and procedures in place.

The above chronology demonstrates the continued evidence of the expansion of the availability of APEL in the HE Sector in the UK. It is, however, much more difficult to find evidence relating to the actual number of students benefitting from APEL. Merrifield et al. (2000) highlight that, although many HE institutions had APEL policies and procedures in place, of these, two thirds had fewer than 100 APEL students. This evidence is corroborated by a detailed study of APEL and quality assurance in SEEC member institutions carried out in 2002, which notes 'the number of part-time students averaged 120 per institution, with numbers ranging from 10 to 700, whilst the number of APEL full-time students averaged 46' (Johnson, 2002, p.15). Johnson also noted that, although APEL was not expected to decline, over half of the respondents did not expect APEL to grow in the following year. The surprisingly low numbers may, in part, be explained by identification and tracking difficulties, but this still represents a low rate of actual provision after 15 years of development in a generally favourable policy context (Johnson, 2002).

To further highlight the possible gap between the existence of policy and procedure for APEL among HE institutions and the actual numbers of students using these processes, in February 2004 the UK Quality Assurance Agency (QAA) issued draft guidelines for APEL. It seems that, even 18 years after the *legitimisation* of APEL by the CNAA, there was still a perceived need to explain, control and offer reassurance in respect of APEL.

The surveys by Merrifield et al. (2000) and Johnson (2002) do at least evidence a high degree of conformity of practice across institutions offering APEL. These demonstrate that, whilst there may be structural variations between institutional or departmental models, there is also significant agreement on the principles and practice, perhaps stimulated by the initial CNAA regulations and ongoing work of organisations such as SEEC and NUCCAT.

In summary, in the UK, APEL is no longer regarded as something new as it has been part of the educational landscape since the 1980s. There continues to be significant interest in the concept of recognising learning through experience among policy makers and educators alike, e.g. the Department for Education and Skills (2006) and Werquin (2007), although the actual level of use does not seem to match the rhetoric surrounding it. The concept of APEL does not appear to have moved on from being considered part of the admissions process, allowing students without formal qualifications to gain entry to programmes and to gain exemption, by virtue of their experience, from some of the formal learning on their chosen programme. Johnson (2002) advocates the need to assure this by positioning APEL within the marketing strategy and admissions process of the institution.

The Benefits of APEL

Almost all of the literature about APEL is concerned with the benefits to students and institutions and examples of practice, through the many journals and other publications which exist (Trowler, 1996, Stoney, 2009, Bergsteiner, 2010,

CEDEFOP, 2010, to name but a few). The consensus is that APEL itself is a positive initiative, which should be available to all students as both a means of entry and exemption from certain parts of their courses (Scott, 2010). These benefits can be placed into three broad categories: widening participation, credit award (or module exemption) and cost.

Widening Participation

I have described earlier that APEL is often regarded as a process that should happen either prior to or at the beginning of the learning programme and seen as part of the recruitment process. As far back as the 1980s, Norman Evans was helping to establish APEL as a means for experienced individuals to join teacher training programmes. Johnson (2002) argues that APEL should be a fundamental part of the institutional recruitment policy and processes, and advertised as such.

APEL is linked to several Higher Education agendas (McDermott et al. 2009), such as Widening Participation. It is often regarded as a means for non-traditional and mature students who do not have the required entry qualifications to gain access to Higher Education and as such contributes to the widening participation agenda of the institution (Dismore et al. 2011).

It is the student's prior experience which is used to determine their aptitude for starting and completing the course they wish to join. Lueddeke (1997), for example, focuses on APEL as a building block for adults wishing to access

Higher Education, and further asserts that APEL could help to unlock doors for those who have traditionally been denied access to Higher Education because of personal, socio-economic or institutional constraints. Heath (2001) discusses ways in which access to nurse education has evolved and the need to allow one's prior experience to count towards entry to such programmes. In the case study, she argues that institutions should establish policies and procedures to facilitate a structured approach to the management of the APEL process, from the point of enquiry through to the award of credit, in order to avoid the use of different approaches which will confuse both staff and potential students alike. Dismore et al. (2011, p.328) conclude that APEL has 'helped widen participation, served the needs of experienced students and encouraged progression'.

Credit Award or Module Exemption

Another key benefit of APEL is the possibility of exemption from all or part of the course for which APEL is claimed. Exempting students from part of the course or indeed whole levels can dramatically reduce the time taken to complete the qualification overall. Falconer and Troy (2007), for example, focus on APEL as an entry route for professionals, in this case within the finance industry, to gain access to qualifications by using their experience to offset the need to take the whole of the course. Their focus also looks at the range and types of evidence which ought to be used to support suitable claims. Scott (2010) examines how gaining credit for one's prior experience can avoid frustration among those gaining credit. Scott's (2010) aptly named article *But I Know that Already*

encapsulates the feeling of frustration among those being taught what they already know.

Cost

My initial telephone survey revealed that there were wide variations in the cost benefits to individuals and institutions. For individuals, there were varying practices between institutions regarding both the charge for an APEL claim and the amount by which the course may be discounted if credit is awarded. In some cases, there was no charge at all, whereas other institutions charged a nominal administration fee of between £25 and £50. One organisation charged a fee of half the usual price for the module. In terms of discounts, again, there were wide variations. In some cases, no discount at all was made, but in other cases between 50% and 100% of the module cost was waived, depending on the level of credit awarded. Therefore, for individuals, although there is significant potential for a reduction in fees, this is by no means universally adopted.

For institutions, there do not initially appear to be significant resource benefits until you make a closer examination. Merrifield et al. (2000) argue that APEL is often seen by practitioners as a labour-intensive form of assessment. However, their research, based on work at Middlesex University, suggests that a reasonable average time allocation for an experienced APEL assessor is four hours per portfolio. If one considers the possibility of an APEL claimant gaining accreditation of equivalent academic credit value to two or three university modules, i.e. in a range of 45 to 60 credits, the time taken is by no means

excessive. The Middlesex University experience suggests that the assessment of very strong APEL claims resulting in awards of over 60 credits is very cost-effective in terms of the time taken to assess in comparison with standard module assessments to the same credit point value (Garnett et al, 2004).

In both cases, APEL has the potential benefit of reducing the cost, both to the learner and the institution. However, as Merrifield et al. (2000) point out, there are potential barriers to APEL in terms of incorrect assumptions, which may be acting as barriers to its greater adoption.

Criticisms of and Barriers to APEL

The earlier sections of this chapter focused on the development of APEL in the UK and internationally along with its benefits and relationship to experiential learning theory. I have also demonstrated the significant practitioner and policy support for APEL. Despite this support, the rhetoric appears to be far from the reality, with no real evidence of systematic or widespread practice of the application of APEL within UK Higher Education. In 2014, the QAA (Scotland) published its *Framework for the Recognition of Prior Learning*. As well as summarising the main benefits of APEL, they outline a number of 'residual barriers which have prevented its use as a widespread, mainstreamed practice in universities' (Quality Assurance Agency, 2014, Foreword, p.4), as follows:

- 'lack of awareness of the potential for RPL opportunities in students and staff

- inconsistent policies and practices between and within institutions which make it difficult for key stakeholders to engage with RPL, specifically professional bodies, staff and students
- the need for more streamlined approaches to support and assessment
- pockets of good practice being developed but not being shared
- lack of staff development opportunities to help build capacity in RPL practice
- perceptions that 'informal learning', or learning outside the traditional contexts, is worth less than 'formal learning' by some stakeholders'.

The wider literature confirms the existence of these barriers and reveals additional categories of criticisms and barriers which are discussed further here.

APEL Research

The first issue is related to the research itself. APEL 'researchers are few and far between' and often referred to as 'introverted' and 'introspective' (Harris et al. 2011, p.6), although they actually usually comprise a number of 'key individuals who make important contributions' (Harris et al. 2011, p.6). Whilst there is a substantial amount of APEL research, 'the field remains fragmented' (Harris et al. 2011, p.7) and as such so is the body of research produced 'without any evidence of what has been done before' (Harris et al. 2011, p.7). The differing ways in which APEL is conceptualised, researched and practised in different countries further adds to the difficulty of inter-country comparisons, even with the development of the CEDEFOP inventories (Harris et al. 2011).

Most of the research on APEL is qualitative, uncritical and lacking in theory (Harris et al. 2011). Bateman and Knight (2003, p.5) describe most of the research as relating to implementation and practice rather than the concept of APEL itself and identify a lack of research on 'macro influences' on APEL. Blom et al. (2004) echo this, suggesting that the research is focused on the application of APEL within education and training and ignores skills recognition in the workplace. The limited variety of types of research are discussed by Misko et al. (2007) referring to a lack of quantitative and longitudinal research on APEL. There is a lack of statistical data (Hargreaves, 2006) on the take-up of APEL, making comparisons difficult.

A significant portion of the research has been policy driven and all the governments, governing bodies or research councils of the countries reviewed in this chapter have funded research into APEL (CEDEFOP, 2016). The vast majority of the research is qualitative and small scale comprising action research, case studies or evaluations of projects and, as such, it is mostly retrospective too. Although there have been some larger scale studies, these are not the norm and tend to be descriptive rather than explanatory or predictive (Harris et al. 2011). The fragmented nature of APEL research, together with the fact that most research is qualitative and retrospective, and the limited nature of the methods used needs to be addressed if APEL, as an area of scholarly activity, is to develop (Harris et al. 2011). This certainly points to some reasons why practice may be lagging behind policy in all of the countries reviewed.

Access, Social Inclusion and Widening Participation

One of the major benefits of APEL is described as its ability to provide individuals who do not possess formal qualifications with the opportunity to use their workplace (or similar) experience either to gain access to education or to gain credit for it through some means of accreditation (Bowman et al. 2003). The reality and the consistent message over time, however, is that APEL has failed to achieve this widening participation potential (Pokorny, 2011).

The dominant practice of APEL is the development-oriented model (Butterworth, 1992), which involves reflective narratives through the production of an evidence portfolio mapped to learning outcomes (Pokorny, 2011). The view that learning outcomes are 'sufficiently transparent' (Betts and Smith, 1998, p.90) can be challenged on a number of fronts. Peters (2006) argues that the language of learning outcomes is both alienating and impenetrable and creates barriers to 'capturing the nature of their knowledge in a meaningful way' (Peters, 2006, p.179). Her argument centres around APEL becoming a process of proving academic ability rather than recognising learning outside of the institution. Using critical discourse analysis, Peters (2005) was able to demonstrate that these controls (i.e. use of learning outcomes) actually acted as a barrier ensuring that 'knowledge gained outside of the institution continues to be devalued and hinders attempts by students to gain recognition', for alternative forms of learning are thwarted (Peters, 2004, p.155). Fraser (1995, p.54 describes students being cynical of APEL through having to 'play the game'. QAA (2014) argue that module learning outcomes play a further limiting role, rather than an enabling

one, as the evidence must exactly match the learning outcomes. For this reason, they advocate the use of level descriptors instead.

Maher et al. (2010) and Cameron (2011) point to inequality in social inclusion, arguing that APEL better serves those from certain socio-economic backgrounds; that is, those individuals with a greater likelihood of already having experienced post-compulsory education and training. This concurs with Wheelahan et al.'s (2003, p.20) earlier arguments that APEL suits those individuals who are 'mid-career, established in the workforce, older, work full-time, and are in associate professional, professional or managerial occupations'. Cameron (2006, p.119) expressed this as those individuals with 'significant accumulated educational capital' and found that those familiar with formal learning systems and discourse are more likely to use APEL and gain from it.

Where APEL programmes use workplace experience as the source of experiential learning, this creates a potential gender inequality. The increased possibility of favouring men over women and ignoring significant alternative experiences of women creates a 'further source of oppression' (Colley et al. 2003, p.60). Andersson (2011) demonstrates a possible gender hierarchy and segregation, where men's competencies are more highly valued than those of women doing similar roles, and cites separate case studies where all male and all female workplaces were examined. The findings showed that the men's prior knowledge was valued as competence but the female competencies were considered insufficient (Andersson, 2011).

In the countries which rely heavily on immigrant labour (e.g. Australia, Canada and Sweden), as well as countries with large, low qualified, indigenous populations (e.g. Australia and South Africa), language is often cited as a typical barrier. Andersson et. al. (2003) revealed difficulties in ensuring fairness among such populations when the assessee does not have a full mastery of the language in which they are assessed. This gap is further exacerbated in countries where indigenous populations have significant educational backlogs, as in South Africa (Harris, 2011). Andersson et. al. (2006) also observed how APEL enacts a form of sorting (for immigrants) by restricting the availability of APEL to areas with specific labour shortages, thus excluding other vocational areas. Comparative studies (Guo and Andersson, 2006, Anderson and Guo, 2009) show a lack of recognition among immigrant professionals despite differences in systems and policy, reducing APEL to a 'technical exercise and governing tool rather than a form of social transformation' (Andersson and Guo, 2009, p.423).

Haigh (1994) observed several myths concerning APEL and its assessment that may have contributed to these early perceptions of APEL, namely: 1) that it is an easy option but less credible than completing study, 2) that it is something for nothing, and 3) how much credit you get depends upon who you talk to, suggesting a lack of clarity and consistency within APEL assessment and the information and support available. She goes on, however, to attempt to dispel these myths in the same short article, describing that APEL and its assessment is

as credible and rigorous as any traditional study for both the candidate and the assessor.

Conceptual Confusion

Many authors have highlighted the conceptual confusion within and surrounding APEL policy and practice (Wheelahan et al. 2003, Hargreaves, 2006, Smith 2008, Cameron, 2011). Whilst many of the systems of APEL described earlier in this chapter may have initially developed with similar intentions, policy and practice has largely developed independently within each country due to the different levels of support, priorities, funding and accrediting systems (Cameron, 2011). This has led to a range of conceptual differences and applications over the years, ranging from notions concerned with access to training programmes or qualifications, to conceptions of APEL as a reflective process directly impacting on the nature of learning (Smith, 2004, p.5).

Problems with equating unaccredited informal learning and formal education have existed throughout the history of APEL (Cameron, 2011). Hager (1998, p.533) summarised the differences from a philosophical perspective, as follows:

- 'Informal learning is typically a different kind from the learning prescribed by the content for formal courses
- Informal learning does not fit very well with the narrow view of knowledge that is taken for granted in formal education

- Learners themselves, influenced by the prevailing assumptions about education and knowledge, are often unaware of the significance, range and depth of their informal learning
- Informal learning is highly contextual in contrast to the generality that is privileged in formal education.'

Assessment Approaches and Limitations

In 1992, Butterworth conceptualised two basic APEL models, i.e. credit exchange and development, which in broad terms still exist to the present day (Pokorny, 2012). The credit exchange model embraced APEL as a means by which those with work experience could demonstrate their competence against a range of predefined standards, such as NVQs in England (Pokorny, 2011). A major criticism of the model was that it reduced APEL simply to a performance related activity related to occupational standards.

In the development model, reflection on experience (Kolb, 1984) is a dominant pedagogy, where students are required to revisit and re-evaluate their experience focusing on the process of learning. They provide evidence of learning through reflective narratives linked to learning outcomes.

In both approaches, assessment is via a portfolio of evidence. Butterworth (1992) was critical of the credit exchange model in two ways. The first because it encourages a reductionist view of the learners' skills and knowledge and is unsuitable therefore for evidencing more complex roles. The second was

because, although credit may be given, the learners' understanding of their competence is not changed by the assessment process, as their learning has not been explored.

Butterworth favoured the development model which 'provides significant personal and professional development for the individual' (Butterworth, 1992, p.50). A number of authors suggest that the principles of reflective practice themselves, however, are problematic for candidates and possibly distort their learning. The main problems with this are that it forces learners to shoehorn their experiential learning into very narrow definitions such as learning outcomes in order to have them recognised, thus missing out on their wider experience (Pokorny, 2012). Many assessors reject the legitimacy of learning until it is translated into the academic language with which they are familiar (Trowler, 1996). This, in turn, may contribute to the widening participation issues identified earlier.

Trowler (1995, p.24) further argues that the development approach may alienate the learner from their own experience 'through its objectification'. Pokorny (2006) echoes this, suggesting that the emphasis becomes more about the conceptual lessons gained from the experience, in isolation from the wider contextual factors. In turn, the learning from the wider experience may be lost by turning the experience into a 'raw material that can be transformed into a commodity to be exchanged for entrance or advanced standing' (Usher, 1989, p.71. Cameron (2006) and Wheelahan (2003) warn of the dangers and limitations of perceiving APEL as a form of assessment.

Whilst some of this literature may seem quite old, it serves to demonstrate how long these issues have existed without adequate solutions, as they exist in current practice to this day (Pokorny, 2012).

Issues of Power and Authority

Hamer (2010) focused on operations of power in the assessor-candidate relationship and questions whether APEL is a benign activity, concluding that more complex and sophisticated recognition systems are needed. Pokorny (2012) echoes these sentiments, demonstrating that the different approaches of tutors created significant differences in both the writing and experience of the APEL process. Those taking a more monologic approach (Gravett and Henning, 1998) to teaching/assessing appeared to view the APEL process in a predominantly normative way, in which the students under their guidance had little agency during the process. These students felt that their identities as experts in their particular professional contexts were unrecognised. The tutors' view that 'you need to write me an essay that connects what has been taught in the module – the theory with your experience – a critical essay and I know what a critical essay is because I am teaching them all the time' (Gravett and Henning, 1998, p.129) only served to demoralise the students and result in an onerous, time-consuming and difficult process.

In contrast, the students of the tutors taking a more dialogic approach (Gravett and Henning, 1998) experienced a more positive impact, increasing their sense

of identity as expert in their professional context. The ways in which these tutors engaged in dialogue about meaning making in the curriculum facilitated this process of learning to talk as a legitimate peripheral participant in the academic community. These students were encouraged to be more explorative whilst working with academic conventions e.g. using learning outcomes to explore alternative ways of meaning making, drawing on their own resources (Pokorny, 2012).

Gibbs and Armsby (2011, p.388) describe assessment as the technique that 'colonises the human as a knowledge subject' by 'being an object of knowledge production' (Andersson and Fejes, 2005, p.610). The process of mapping such knowledge from the informal/non-formal to the formal, however, is governed by those who have the 'power to render the transformation valid' (Andersson and Fejes, 2005, p.388). The transformation is therefore not about what people know or what they can do, but about exerting control over the 'certification and its associated social capital' (Andersson and Fejes, 2005, p.388). This is unfair, as the experience loses its 'widest value by being commoditised through its conversion into credit for a qualification that says less than the experience is worth' (Gibbs and Armsby, 2011, p.390). Gibbs and Armsby (2011) argue that the recognition of prior learning, and therefore social justice for the experience of workers, should not depend on its accreditation in this way. They put forward a distinction, as follows, between 'desert, applicable to recognition, and merit, appropriate for conferring academic qualifications' (Gibbs and Armsby, 2011, p.390):

> ‘Desert — an entitlement for actions, which is independent of and not adequately recognised by procedural compensation and often attracts moral praise; and
>
> Merit — an entitlement based on activities or achievements which are superior in terms of relevant standards or criteria, recognised by procedural compensation and often attracting moral praise.’

They propose that the award for formal certification ought to be based on desert, which takes account of the whole experience of the subject, and they consider that new less qualification-specific criteria are needed, against which any achievement can be measured. This, in turn, lessens the power held by the institution and increases the social inclusion intentions of APEL (Gibbs and Armsby, 2011).

Awareness

A significant barrier to the more general take-up of APEL appears to be a widespread lack of awareness among staff, either about APEL itself or the existence of institutional policy in this area (Merrifield et al. 2000, Dismore et al. 2011, QAA, 2014). This is worrying, given the fact that most colleges and universities have declared they have APEL policies in place (Merrifield et al. 2000, Dismore et al. 2011, CEDEFOP, 2016). Dismore et al. (2011) found that, of those they surveyed, some 42% of students only became aware of APEL as a result of discussion with their tutor or programme manager, whereas only 10.9% found out via publicity material. When this is compared with the percentage of

staff awareness of institutional APEL policy (47.8%), it raises a number of potential problems. The immediately obvious problem is that, if fewer than 50% of staff are aware of APEL policy within the institution and students are mostly made aware of APEL by the staff, then significant numbers of students are potentially not being made aware of the APEL opportunities.

One of the main benefits identified for APEL is described as its potential for increasing recruitment and improving widening participation (Dismore et al. 2011, Harris et al. 2011). However, if students are only finding out about APEL post-enrolment from their tutor, then it cannot be claimed that this was part of the recruitment process, as it happened afterwards. In this situation, it cannot be claimed, therefore, that APEL contributes to widening participation. It appears from these surveys that the major recruitment benefit for non-traditional learners is not being effectively realised either by the institution or the individual.

Another problem concerns the timing and preparation of the APEL claim itself. If we accept that significant proportions of students are made aware of the APEL opportunity subsequent to enrolment, then two possible issues emerge. Prior to the award of an APEL claim, the student must prepare the claim and an academic board of some description, such as an APEL board, will need to approve this (QAA, 2004). The first issue concerns whether the student would have adequate time to prepare and submit the APEL claim before the APEL board meets to consider it. Many ‘discussions with staff would take place after they had been recruited, leaving the student little time to adequately prepare for

the APEL process' (Dismore, 2011, p.322). Related to this is the timing of awarding the credit. It is possible that, depending when the APEL board convenes, some students may apply for and receive credit for modules they have already started as they only became aware of APEL once the course had started. This could, understandably perhaps, lead to issues with student dissatisfaction. If students are to find out about APEL from their lecturers, it also seems important that all such staff have all the relevant information to raise awareness among their students, yet almost 48% of staff were either not aware of or unsure about their institution's APEL policy, practices and procedures (Dismore et al. 2011).

QAA (2014) point to the fact there are multiple points of access for information and guidance about APEL, causing confusion among those who potentially may use it. To be an effective admissions tool, APEL has to be understood by all staff who represent the institution to potential applicants and by staff operating the admissions process. Again, there are concerns that APEL is perceived and treated as a marginal or highly specialist activity and not advanced as part of the mainstream institutional offer (Dismore et al. 2011). The lack of clearly defined access points for both staff and students and the challenges relating to access to consistent information present an immediate barrier 'which needs to be overcome if accessibility is to be improved' (QAA, 2012).

Merrifield et al. (2000, p.42) were informed by one APEL co-ordinator that 'advice and guidance is a problem as I am the only person and it needs to be delegated out into departments. We need more people in the institution turned on to APEL'.

Johnson (2002) points to the need for enquirers to receive informed advice about the possibilities of APEL before committing to the APEL process, and argues that APEL should be a fundamental part of the institutional recruitment policy and processes, and advertised as such.

Training and Support

QAA (2014) describe the lack of staff development opportunities to build APEL capacity as a major barrier to its wider uptake. Merrifield et al. (2000) argue for the need for support as a crucial aspect of making a successful claim, and point out that too many organisations neglect this. They argue that the role of the APEL adviser is to facilitate reflection upon experience in order to identify and articulate learning achievement which is either of general relevance to the proposed programme or specifically relevant to a component of the programme i.e. the basis for a claim for exemption from a specific programme component. The APEL adviser also has a key role in advising on the nature, role and sufficiency of evidence, which may take a variety of forms e.g. artefacts, videos, tapes, websites, written case studies as well as original written documents. The role of the APEL adviser is highly skilled and requires the provision of support and staff development to the adviser.

Both Merrifield et al. (2000) and Johnson (2002) identify a model of APEL which starts with a significant guidance function to produce a portfolio, followed by an assessment process of varying complexity and a ratification process by a formal committee on behalf of the institution. Almost all institutions they surveyed

claimed to offer guidance to students on the preparation of a claim for APEL (Merrifield et al. 2000) and in 50% of cases this is carried out by designated APEL advisers.

Merrifield et al. (2000) identified that guidance is provided on an individual basis in almost all institutions and this is supplemented by group sessions by half of the institutions. Written guidelines are provided by two thirds of the institutions to students making APEL claims. Just over half of institutions offer support within the context of an APEL module, with two thirds of these offering credit for the module in addition to the actual APEL claim.

On the face of it, this paints quite a favourable picture. However, the feedback from staff tells a rather different story. 'Only a quarter of the institutions provide formal training to admissions or guidance staff on APEL' (Merrifield et al. 2000, p.21). One in five of the institutions surveyed had no written guidelines for either staff or students. This indicates a significant gap between the institutional policy level and the reality of APEL practice at the practice level.

Some eleven years later and despite a significant effort on behalf of QAA (2004) to develop APEL, many of these problems still existed. Dismore et al. (2011, p.323) build on the earlier findings of Merrifield et al. (2000) and make specific reference to the 'heavy reliance upon departmental staff not designated as APEL advisers and a distinct lack of APEL training'. Their investigation focuses on the key stages of an APEL claim as described by Stoney (2009), namely:

- Advising on APEL
- Planning a claim
- Producing a claim
- Arranging for assessment
- Monitoring, review and evaluation

Dismore et al. (2011) reported significant differences between the volumes of staff receiving support at each stage and those that did not (see Figure 1). At each stage, over 50% of the staff reported having had ‘little’ or ‘no’ support compared to around 20% reporting they had had ‘some’ or ‘a lot’ of support. They also found there appeared to be more support on the ‘Advising on APEL’ stage than any of the others, which were broadly comparable.

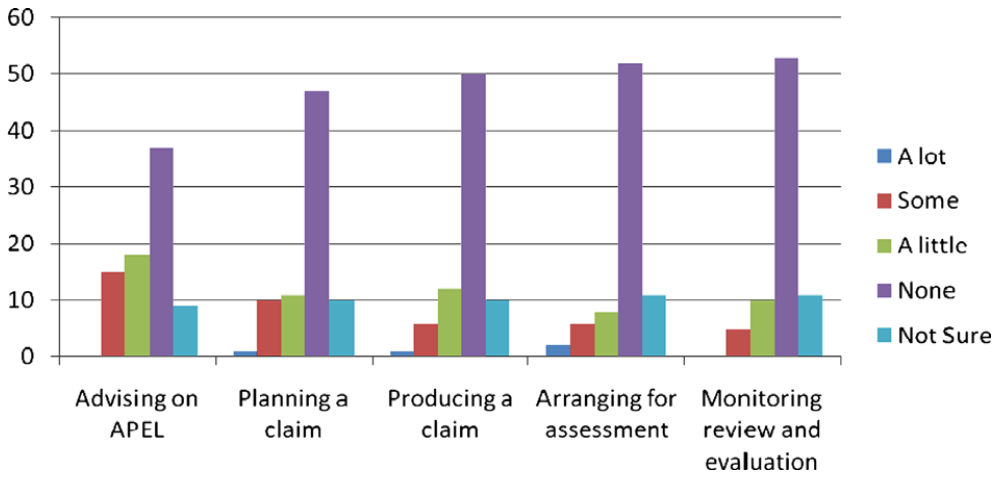

Figure 1 – Levels of support in conducting APEL
(reproduced with permission from Dismore et al. 2011)

These data suggest a potential demand for support among practitioners but, when asked to comment about their support requirements at each stage, Dismore et al. (2011) found some interesting variations (see Figure 2). In each

category, more than 50% of the respondents said they needed ‘some’ or ‘a lot’ of support. In all cases, the need for ‘some’ support was significantly higher than those who felt they needed ‘a lot’ of support.

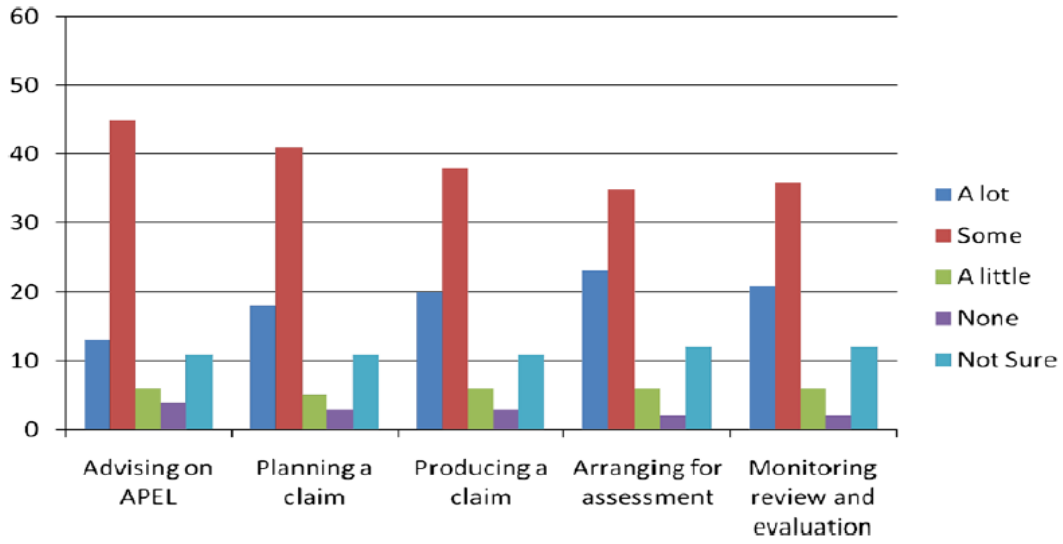

Figure 2 – Levels of support needed to conduct APEL
(reproduced with permission from Dismore et al. 2011)

Interestingly in the ‘Advising on APEL’ category, the need for ‘a lot’ of support was lower than in the other categories. There is therefore a strong correlation as, if support is provided, the perception of needing it falls. In itself, this could also contribute to reducing the perceived lack of awareness identified above. Similarly, the need for ‘a lot’ of support increased in the other categories and was particularly higher in the ‘Arranging for assessment’ and ‘Monitoring, review and evaluation’ categories. This further demonstrates the need to improve the level of support provided if the level of awareness is to be improved.

The poor quality and range of evidence Scott (2010) encountered could also be partly attributed to the need for support highlighted by Dismore et al. (2011). This relationship between the paucity of evidence and the need for better support

could be a significant factor and perhaps points to a further barrier at an institutional level where there is no systematic or robust institutional approach to the application or support of APEL.

The Proportion of Credit Institutions are Prepared to Offer

Both Merrifield et al. (2000) and Johnson (2002) describe variations between the different institutions in the amount of credit derived from APEL that institutions are prepared to allow towards their qualifications.

Of the credit required to achieve an award, institutions usually have an upper limit of between 50% and two thirds of the credit which they will allow to be achieved via APEL e.g. a maximum of 240 of the 360 credits required for an Honours Degree (Garnett et al. 2004). These limits are typically specified within the universities' assessment regulations, but the rationale for them is rarely articulated (Garnett et al. 2004). It appears to be based upon a 'general feel of what proportion has to be studied under the direct auspices of the degree awarding body and a slightly more tangible need to have a certain number of graded academic credit points upon which to base an Honours Degree classification' (Garnett et al. 2004, p.11).

This position appears to lack transparency and is potentially confusing for potential APEL applicants, for two reasons. The first is the unknown i.e. if the student does not know how much credit they should aim for or could claim, this may affect whether they choose to go down the APEL route. The second is that

some students may find that they can gain more credits through experiential learning towards their qualification at one university than at another, for a similar programme.

It is significant that the QAA (2004) *Guidelines for APEL* do not assume a maximum limit to the proportion of a Higher Education qualification which can be achieved by APEL. The upper limit for a claim, therefore, does seem to be arbitrary on the part of the awarding institution.

Bureaucracy

As identified earlier, the poor level of awareness, training and support for staff may be a specific barrier. Trowler (1996, p.26) argues that a 'common response to uncertainty and insecurity is to erect barriers, in this case bureaucratic procedures, in an attempt to ensure that standards are maintained'. This can result in the creation of complicated and time-consuming procedures which 'present a barrier to anxious students and hard-pressed staff' (Griffin, 1987, p.9). As a result, potential students may be deterred from applying when they see the process involved. This, in turn, may affect the potential for the widening participation opportunity APEL is supposed to offer. Where bureaucratic procedures are put in place to protect quality, staff are less likely to get involved and procedures will slow down. In this scenario, the defence of quality effectively means defence of the status quo (Usher, 1989).

Jooste and Jasper (2010) and Ecclestone (1993), among others, have developed implementation frameworks to assist other institutions in their APEL efforts. These broadly prescribe the same process for APEL as one in which the student (with or without assistance from the staff within the institution) amasses evidence of their experience and describes how these experiences meet the criteria of the learning outcomes of the particular module.

Assessment often involves staff making judgements on how far the student has been able to match and evidence the learning outcomes of specific modules. This approach could lead to uncertainty and possible confusion for the student, as it does not necessarily allow them to gain full recognition for their experience due to the requirement to fit neatly within the course framework. Middlesex University appears to have overcome this problem by recognising work-based learning as a field of study in its own right. In this way, individuals can claim for the full extent of the learning they have achieved rather than just that which happens to match a predetermined and prescribed programme (Garnett et al. 2004). However, this practice is by no means widespread.

Fees/Cost/Time

Merrifield et al. (2000) reported quite a variation in the fees policies of Higher Education Institutions in respect of whether a fee is charged for APEL assessment in the first place and, if so, how much this will cost. This still seemed to be the case some ten years later (Scott, 2010). For the potential student, the

lack of clear information about the charging policy may cause confusion or doubt and possibly deter them from enquiring further about claiming APEL.

For the institution, the fact that every APEL claim will be different presents them with issues about how to adequately resource the process. For example, Wailey (2002, p.35) identified some widely accepted assessment criteria when considering APEL claims, as follows:

- 'Validity, relating to the match between the evidence presented and the learning outcomes claimed
- Sufficiency, relating to sufficient breadth of evidence, including reflection, to demonstrate the achievement of all the outcomes claimed
- Currency, demonstrating that what is being assessed is current learning
- Quality, relating to the evidence demonstrating the required level of learning achievement'.

For each student, the APEL assessor needs to make these judgements about every item of evidence submitted by the student. In the case of some claims, this may consist of many documents. The variable nature of the evidence provided for APEL claims, therefore, has the potential to need significant resources in order for this process to be carried out properly, with adequate levels of support. Support is often resourced through the mechanism of providing it within the structure of a module. Some institutions also charge an additional portfolio assessment fee (Garnet et al. 2004).

Attitudes towards APEL from Academic Staff

The Merrifield et al. (2000) survey reported a general positivity towards APEL among its respondents, with strong support for the concept of APEL as a learning experience in its own right. Most respondents also agreed that the award of APEL is not detrimental to educational standards.

That said, a substantial minority highlighted concerns around: the level of student demand (38 per cent), the reliability and validity of APEL (33 per cent) and problems with grading and marking APEL claims (31 per cent). Dismore et al. (2011, p.317) echo these concerns, describing APEL as often regarded as problematic in Higher Education because it 'challenges perceptions of learning'.

Winter (1993) argues that poor awareness among staff leads to a lack of clarity about how the level of the students' experiential learning is determined. The attempt by the QAA to rectify this in 2004 through the issue of the guidelines referred to earlier does not seem to have been successful, thus leaving it to the judgement of individual academics. Despite the advantages described for APEL, there is continued confusion about its implementation (Challis, 2005, Pitman, 2009). It appears that, although there continue to be many advantages described for APEL, 'there is little practice on which to base any generalised patterns of activity' (Challis 2005, p.25).

The learning has normally taken place elsewhere at another time with credit awarded on the basis of evidenced learning. The developmental process of

reflecting on the experiences is generally considered to be worthwhile, although examples do exist of learners feeling alienated through its objectification (Trowler, 1996). Peters (2005) reported that, whilst quality and appropriate accreditation are paramount, lecturers also want APEL to be easy to assess, academic and to have a personal dimension.

Other examples of variation from common norms of assessment practice include no right of resubmission of the APEL claim. Indeed, 58 per cent of institutions do not provide for the possibility of appeal against an APEL assessment decision (Merrifield et al. 2000 p.24). Both Johnson (2002) and Wailey (2002) advocate the importance of APEL coming within the mainstream quality monitoring processes of the institution, but QAA (2014) suggest this is far from the case.

Technology Used in the APEL Process

The final section of this review examines the literature concerning the use of technology within the APEL process. There is a considerable volume of research concerning the use of technology within the assessment process (Whitelock et al. 2011, for example). However, none of this is concerned with APEL, save for two notable exceptions.

Haldane and Wallace (2009), of University of Derby Corporate, explored the use of technology to facilitate the process of APEL. They recognise many of the issues highlighted above, concerning the 'well established processes available to educators for the validation of competence' (Haldane and Wallace, 2009, p.369)

and suggest that these mechanisms could be deployed more frequently in the future.

Their rationale concerns the increasing demand to recognise and accredit prior learning in a systematic and consistent way, in order to enable access to Higher Education to become more efficient and cost-effective for an increasing number of mature students with a range of work experience and non-typical qualifications situations. Their study draws on the earlier work carried out by Stephenson and Saxton (2004), which evaluated the then University for Industry's (Ufi) *Learning through Work* programme.

The *Learning through Work* programme was first developed in 2001 by the Ufi but it is the final system launched in 2004 which Stephenson and Saxton (2004) evaluate. The system comprised a basic architecture which allowed partner universities to use an online system to host APEL evidence which could then be assessed by an appropriate tutor. This was extended to include negotiated learning contracts which, in effect, used APEL on an ongoing basis through learning which took place on the job. Stephenson and Saxton's (2004) research takes the form of a report analysing data as staff and learners use the online system they developed, which they then sought to generate theory from. They argued that there was huge potential learning which could be generated from the project concerning the use and adoption of learning technology (Stephenson and Saxton, 2004) in this instance, using grounded theory as a basis for producing learner-centred propositions emerging from the data itself (Glaser and Strauss,

1967, Strauss and Corbin, 1997). Stephenson and Saxton (2004) conclude with some positive implications for the adoption of technology, recognising however that theirs was small scale study and would require further larger scale analysis. The main implications, however, do correlate with issues highlighted earlier i.e. that there is definitely a significant demand for a more systematic application of APEL across HE, and that this must also be supported by adequate training to ensure APEL accreditation programmes are operated successfully.

Haldane and Wallace (2009) argue much the same in their rationale and context section and recommend an alternative online approach through the linking of learning outcomes to evidence requirements. They propose a set of level indicators which provide guidance on experience and evidence requirements to assist students in estimating their likelihood of achieving APEL. The report concludes, however, with the project software still in development and largely untested. The software has subsequently been released, though no update or evaluation has been published.

Implications for Research

The vast majority of the research into APEL is concerned with increasing knowledge about it or the range of its possible benefits. There seems to be little disagreement among policy makers and practitioners that the concept of APEL is a good thing, particularly for those adults wishing to gain entry to programmes where they do not possess the usual entry requirements. A number of benefits point towards a generally positive attitude that one's experience ought to be able

to be considered (at the very least) as helping to gain entry to programmes and, in relevant cases, to gain credit which offsets some of the modules one would otherwise have had to study. Despite this, APEL is not routinely or systematically offered to students and as such continues to fall short of the potential for APEL take-up that the rhetoric suggests there ought to be.

By drawing on international perspectives I have demonstrated valuable comparisons between the development of APEL in UK higher education and internationally. This contrasts the different models and perspectives of APEL in these countries and how it has evolved within an ongoing struggle between practice and policy

The literature has revealed the existence of a number of criticisms and barriers which may be affecting the wider uptake of APEL. However, as the volume of research in this area is small, this is by no means conclusive. There is a definite gap in the body of research concerning APEL, pointing to a need for further investigation. The small number technology applications reported and the fact that neither is currently in widespread use or were developed to address barriers within the APEL process also points to a need for further investigation.

Conclusion

In this chapter I have investigated the literature concerning the development of APEL and experiential learning in the UK and internationally, as well as the potential benefits and possible barriers which may be affecting its more

widespread adoption. The benefits of APEL suggested in the literature suggest a positivity towards APEL among Higher Education Institutions and their staff, yet the overall use of APEL remains quite low. Although the literature concerning barriers to APEL is quite limited, there are some useful indications of certain categories of barriers that may exist, though these are by no means conclusive. There is also only very limited literature on the use of technology in supporting the APEL process. Further research on the identification of barriers and the use of technology to overcome them is therefore required if we are to understand whether widespread adoption of APEL is possible. In the next chapter I discuss my research methods in undertaking this research.

Chapter 3 Research Methods and Design

Introduction

In the previous chapter, I identified a number of criticisms and barriers acting on APEL which may be affecting its more widespread take-up, despite the range of also identified benefits.

In this chapter, I will discuss the research methods used in the research, as follows:

- the theoretical framework and approach
- the research design
- the research methodology
- ontological and epistemological issues
- author assumptions
- ethical considerations.

Theoretical Framework and Approach

In experiential learning theory, Kolb (1984) argues that, in order to gain genuine knowledge from an experience, the learner must:

- be willing to be actively involved in the experience
- be able to reflect on the experience
- possess and use analytical skills to conceptualise the experience, and

- possess decision-making and problem-solving skills in order to use the new ideas gained from the experience

This theory is conceptualised as an activity process through which one reflects on the experience to determine what has been learned from it, as in Figure 3 below.

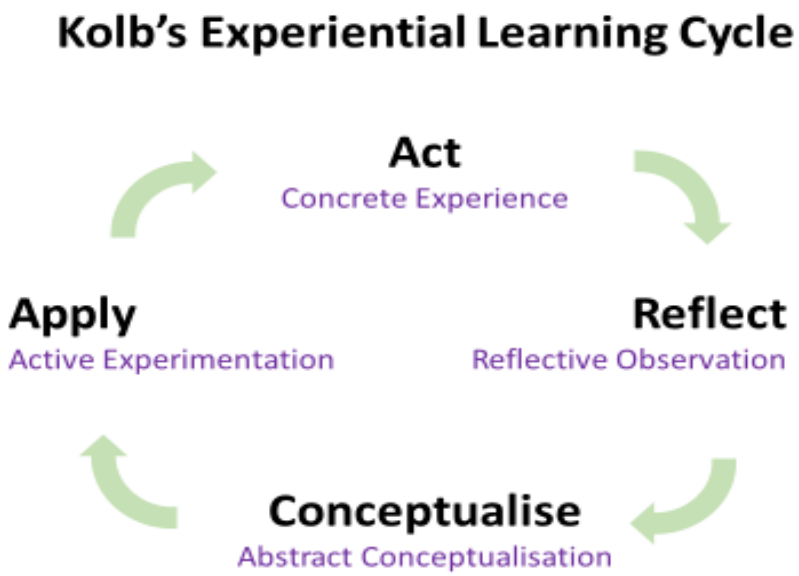

Figure 3 – Experiential learning cycle
(reproduced from Kolb, 1984)

Although there are several variations and adaptations of Kolb's original model which have emerged over the years, with additional stages and definitions (Moon, 2005, Lindsay and Berger, 2009), there is a significant overlap in their core principles in that:

- they are all conceptualised as a cycle of activity which may be repeated i.e. a process
- they all require reflection on the experience(s) in order to understand what has been learned so this can be acted on.

This conceptualisation of experiential learning is useful when describing the part of the APEL process through which the individual attempts to identify what they have learned from their experience. However, APEL as an activity involves many more stages, from raising the initial awareness through to the assessment and award of recognition.

Activity Theory provides a theoretical lens through which to describe the APEL activity system more fully. Activity Theory was pioneered by Vygotsky (1978) and Leont'ev (1981), who looked to understand human activities as systemic and socially situated phenomena. It became a major psychological approach in the former USSR, as well as being widely used in both theoretical and applied psychology, and in education. It is a conceptual framework used to consider an entire activity system (including teams, organisations, etc.) beyond just one actor or user. It 'is a conceptual framework based on the idea that activity is primary, that doing precedes thinking, that goals, images, cognitive models, intentions, and abstract notions like 'definition' and 'determinant' grow out of people doing things' (Morf and Weber, 2000, p.81).

Activity Theory provides a holistic lens in understanding patterns of activities (Hasan, 2005) and a rich understanding of how people collaborate i.e. how they carry out purposeful collective activities, with the assistance of sophisticated tools, in complex environments (Waycott et al. 2005). The basic principle is to produce a description of 'who is doing what, why and how' (Hasan and

Kazlauskas, 2014, p.9), where the relationship between the subject (human doer) and object (the thing being done) forms the core of an activity.

Vygotsky (1978) originally visualised the activity system in the form of a mediation relationship in which the subject achieves the object through the mediation of tools, as in Figure 4. In this way, Activity Theory is said to be object or goal-oriented.

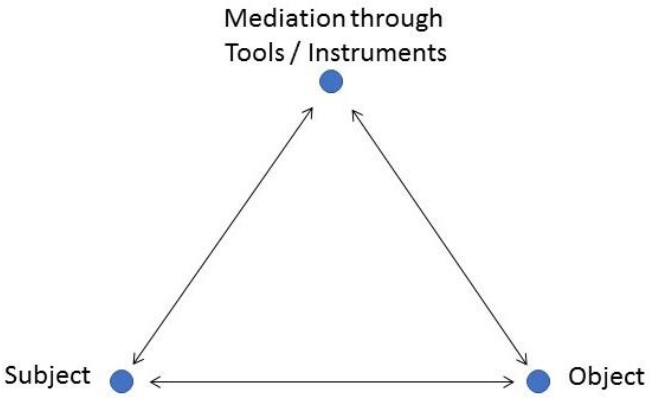

Figure 4 – The concept of mediated activity
(reproduced from Vygotsky, 1978, p.54)

In this model, the activity both mediates and is mediated by the physical and psychological tools used, as well as the social context of the activity. This two-way concept of mediation implies that the capability and availability of tools mediates what can be done and the tool, in turn, evolves to hold cultural and historical knowledge of how a society works and is organised. Tools can be primary (physical), secondary (language, ideas, models, etc.) or tertiary (communities, context or environments) (Hasan and Kazlauskas, 2014).

This can be directly applied to APEL, where the *subject* is the APEL claimant who wishes to make a claim. By mediating through the *tools* of reflection and evidence gathering, they hope to achieve the *object* (goal) of gaining recognition for their experiential learning.

This original version of the model, however, is also limited to the individual and does not consider the wider activity system. For that, I used Engeström's (1987) expanded model which extends the original Vygotsky model to include the social and collective elements of the activity system. This extended model (see Figure 5) accounts for the whole activity system i.e. the object (or objective/goal), subject, mediating artefacts (tools/instruments), rules, community and division of labour.

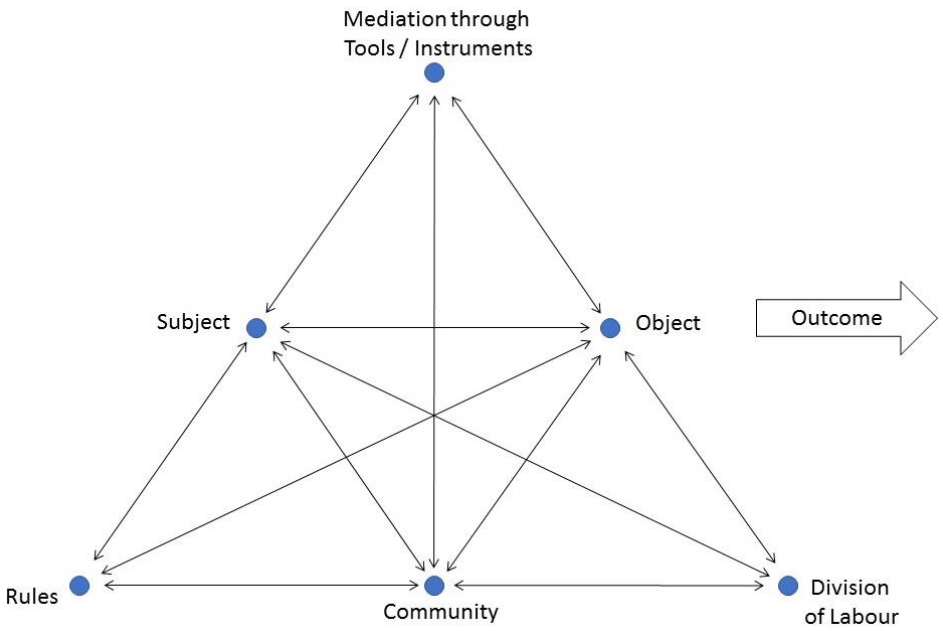

Figure 5 – The structure of a human activity system
(*reproduced from Engeström, 1987, p.78*)

The *subject* can be either a single individual or a group/community, meaning that it can also be an organisation or a group of organisations with a shared object. The *object* is the 'problem space' or goal at which the activity is directed. *Instruments/mediating artefacts* or *tools* refers to the physical or symbolic external or internal tools that are used to mediate the relation between the subject and the object. This relation is simultaneously influenced by explicit and implicit norms or *rules* that regulate actions and interactions, the *community* of actors who share the same object and the *division of labour* between the community members within the given context. Together this creates an activity outcome (Engeström, 1987, Kuutti, 1996, Plakitsi, 2013).

Using this extended version of the model as a lens through which to view APEL, it was then possible to conceptualise APEL as an activity system in the following way:

Table 1: The APEL Activity System

Activity System – APEL	
Activity element	**Actor within the system**
Subject	The person or people wishing to make an APEL claim
Object/Goal	To create valid and successful APEL claims
Tools/Artefacts	Mediations between the subject and object towards the goal Process of raising awareness Production of institutional policy Identification of experience Reflection on experience Curation of evidence artefacts Process of building a claim and in which format Process of submitting claim for assessment

Activity System – APEL	
Activity element	**Actor within the system**
Outcome	Successful APEL claim, leading to: • award of academic credit • entry or advanced standing to a course Unsuccessful APEL claim, leading to: • need for more evidence or reflection
Rules	Institutional rules e.g. policies that govern the APEL process Institutional norms or unwritten rules e.g. local practices, bureaucracy, power
Community	The participants within the APEL activity system, e.g. institutional staff and APEL claimants
Division of labour	The roles of members of the community e.g. Student – makes claim Assessor – assesses claim APEL Board – approves claim

Research Design

The value of Activity Theory is that it provides a language and a set of frameworks for making sense of what is discovered about the situation through observation, interviews and other methods. Using Activity Theory as the lens for research takes whole activity as the unit of analysis, where activity is defined by the dialectic relationship between subject and object, in other words, who is doing what for what purpose (Vygotsky, 1978, Hashim and Jones, 2007).

The analysis of activity requires the research to be designed in three broad steps to produce a 'holistic and insightful mechanism for providing a description of a situation' (Hasan and Kazlauskas, 2014, p.12), namely:

- 'Step 1 - Identify the significant activities of the system to be investigated together with each activity's subject(s), object and purpose

- Step 2 - Identify the actions and mediating tools of the activity or activities, where tools can be primary, secondary or tertiary
- Step 3 - Identify the dynamics and tensions within and between the identified activities'.

These steps, they argue, enable the researcher to provide a deep understanding of what is happening from the views of those being researched e.g. tutors and students. For this reason, these steps are incorporated within the research design outline in Chapter 1 (and further detailed in Chapters 4 and 5). The Preliminary Research and Literature Review of my research incorporate Step 1 above, in which I identify the main criticisms and barriers affecting the wider take-up of APEL and, in doing so, also address my first research question, 'What are the barriers to APEL adoption?'. The Pilot Research incorporated Step 2 above, through which I designed and developed the technology solutions which were the new mediation tools within the activity system. This also addresses my second research question, 'How could technology help to overcome any potential barriers?'. The integration of technology is seen as a tool through which to mediate the subject towards the object (Hashim and Jones, 2007). The assumption is that the tool 'attains its qualities of function, aesthetics, and ethics as it is integrated into the actual activity; only in practice does it become a tool. In other words, to become a tool is to become part of someone's activity' (Christiansen, 1996, p.177). The Main Research Study incorporates the final step above, in which I seek participant views on the extent to which the new tools helped overcome the barriers. In turn, this addresses my final research question,

‘How effective is the prototype software application I created in overcoming potential barriers?’.

Engeström (1987) argues that there are four sources of tension in an activity system, namely:

1) Within elements of activities, e.g. shortcoming of the tools used
2) Between elements of activities, e.g. issues of usability between the user (subject) and the tool
3) Between an activity at one time and a later more advanced form, e.g. if new tools automate operations of an activity, humans may no longer be needed to do those operations, e.g. driverless trains
4) Between different activities, e.g. misunderstandings between the teaching of the teacher and the learning of the learner.

Viewing the criticisms and barriers identified within the literature from this perspective and subsequently describing them within the activity system, I established most tension lay between elements of activities (i.e. tension source 2) and some lay within elements of activities (i.e. tension source 1). The following table shows how the barriers and criticisms from the literature act as sources of tension between and within elements of the activity system.

Table 2: Relationships and Tensions within the Activity System

Criticism or barrier identified in the literature	Element(s) of activity system where tension exists	Description of relationship or tension
APEL Research	Subject, Tools and Object	The generally fragmented, small scale and narrow range of methods used in APEL research points to reasons why practice is not more mainstream. This creates general tension across the whole activity system but more specifically through the Subject, Tools and Object, due to the differing ways APEL is perceived, conceptualised and practised.
Social Inclusion	Subject and Community Rules and Object	There are issues concerning who exactly can benefit from APEL raising doubts about its social inclusion and widening participation credential. Tension exists between the Subject and Community as well as between the Rules and Object, because it is argued APEL only benefits certain members of the community e.g. those with existing education capital. Immigrant populations and those without a formal educational background can therefore be excluded. Where APEL exists to recognise workplace or work-based experience, this can lead to tensions between gender and the possibility of female exclusion.
Conceptual Confusion	Rules, Community and Subject	The disparate way in which APEL has developed over the years has led to a range of policy and practice differences within and between countries and, as such, increased the conceptual confusion about what APEL is, who it is for and how to do it. This creates tension, firstly between the Rules and Community, but also for the Object in trying to make sense of whether APEL is a viable route for them to take.

Criticism or barrier identified in the literature	Element(s) of activity system where tension exists	Description of relationship or tension
Assessment Approaches	Rules, Subject and Object	The limitations of using credit exchange and learning outcomes based assessment serve to restrict the range of experience which may be counted towards an APEL claim. This creates tension in achieving the Object if the experiences are only partially recognised due to the organisational rules which limit what the Subject can use as evidence.
Power and Authority	Subject, Object and Division of Labour	The way in which candidates are supported through the APEL process by their tutor directly affects their satisfaction with it. More monologic approaches serve to create tensions in the Division of Labour which restrict candidates' explorations of their experience and reduce their own agency as an expert. More dialogic approaches to support may help to overcome this.
Awareness	Subject, Community and Division of Labour	There are two levels of tension concerning awareness. The first between the Community and Subject. The Community in this case is the institution. Where it does not publicly promote APEL, then there is tension between it and the Subject because the student does not know to ask about it. The second is between the Division of Labour and the Subject. In this case the tutor should also make the Subject aware of APEL. Where tutors are not aware of the institutional APEL policy, this creates tension in awareness between them and the Subject.

Criticism or barrier identified in the literature	Element(s) of activity system where tension exists	Description of relationship or tension
Training	Subject and Division of Labour	Tutors do not always feel they have enough training and support to carry out APEL activities. This creates tension between the Division of Labour and the Subject if the staff member is not able to provide adequate levels of support to the student.
Amount of Credit that may be claimed	Subject and Rules	Rules exist within institutions to limit the amount of APEL that may be claimed towards a qualification. This creates tension between the Subject and the Rules due to the limitations of such rules where the level of experience is greater than the credit which may be given. This can lead to student dissatisfaction with the APEL process.
Bureaucracy	Subject, Tools, Object and Rules	The bureaucracies which have arisen around APEL concern complex and cumbersome processes both in the building of claims and their management at an institutional level. These create tension for the subject in mediating with Tools to produce sufficient evidence to achieve the Object. This may be due to institutional rules and those created within departments. Overly complex procedures may hinder the student's perception of APEL as a daunting and abstract concept resulting in low take-up.
Fee/Cost/Time	Subject and Rules	The potentially time-consuming nature of APEL makes it difficult for organisations to plan and resource for APEL which creates tension in the availability of staff (Division of Labour) to support the subject when they do wish to make a claim. Inconsistencies within fee policies create tension between the Subject and Rules which may affect student perception and take-up of APEL.

Criticism or barrier identified in the literature	Element(s) of activity system where tension exists	Description of relationship or tension
Attitude of Staff	Division of Labour, Object and Subject	The differing attitudes towards APEL, its application and assessment cause tension between Division of Labour, the Object and the Subject. In these cases, the attitude of the staff can lead to differences in practice and assessment which can lead to inconsistency of assessment and poor student experience.

The next sections of this chapter describe how the research design and methodology were developed within this theoretical framework.

Research Methodology

My research is situated within the interpretivist paradigm. This is entirely suited to Activity Theory which, as an approach, underpins the complex and dynamic human problems of research and practice, and is geared towards a practice which embodies a qualitative approach that offers a different lens for analysing processes and the outcomes (Hashim and Jones, 2007). My aim was not to produce generalisable findings but to describe and interpret the evidence in such a way as to enable me to make theoretical inferences about the potential barriers within the APEL process and what happens to students and tutors within it when a technology solution is introduced to help overcome these. My hope is that the concepts and conclusions which emerge may prove useful in developing future practice.

The qualitative method supports this, given that its goal is ‘to produce a coherent and illuminating description of and perspective on a situation that is based on and consistent with detailed study of that situation’ (Schofield, 1993, p.93). To achieve this, the research is necessarily small scale and exploratory and set within an action research framework.

Kemmis (1993) notes that action research involves the application of tools and methods from the social and behavioural sciences to practical problems with the dual intentions of both improving the practice and contributing to theory and knowledge in the area being studied. Action researchers either participate directly in, or intervene in, a situation or phenomenon in order to apply a theory and evaluate the value and usefulness of that theory (Argyris and Schön, 1989). In this way research can be used not only for theory testing, but also theory building and/or expanding (Galliers, 1991).

In line with Kemmis (1993), I undertook the research as a participant in the APEL process at the college where I worked. My investigations have taken the form of action research, with the aim of modifying the research as it developed through key phases described in Chapter 1, whilst studying the actions, reactions and feedback of the students and colleagues involved. Kemmis (1993. p. 181) has described action research methods as placing 'the practitioner at centre stage in the educational research process'. This means that the research cannot pretend to be objective or value-free since it is imbued with the values I bring to my role as practitioner and researcher, and which are a motivating force behind my study.

This is aimed at illuminating the process of APEL in the particular context in which I am involved and ultimately at bringing about changes in that process, which help to overcome some of the perceived barriers through the introduction of technology. That said, I have attempted to approach the data without preconceptions and to allow them as much as possible to speak for themselves, at the same time identifying any ideas and interpretations which may be distorted by ideologies either pertaining to the institution or to higher education in general, and ideas of who or what it is for. I would like to think that this research would play both an advocacy role in contributing to a greater understanding of the importance and relevance of prior experience at the college and a practical role in empowering the participants by confirming students' beliefs in the validity of their learning from experience, and increasing the recognition of learning from experience by tutors as well as their confidence in assessing claims.

The data collection process was systematic but not exhaustive (Mitchell, 1984). I have not aimed to collect data from a whole cohort of students or a fixed number of tutors within a particular age-group or discipline. Nevertheless, as I hope to demonstrate later in the thesis, I have set out systematically to collect data from students and colleagues involved in the APEL process, taking samples at the three stages of development, i.e. the preliminary, pilot and main stages of the research, in the form of documents and recordings of formal and informal speech. I seek to bring light to my research questions through the different types of data collected. My research therefore represents a ‘telling case’ (Mitchell, 1984).

Ontological and Epistemological Issues

Interpretive research is especially helpful when the questions being examined are exploratory in nature or where the focus is more on human intent and meaning. Interpretive ontology views all reality as subjective (Lather, 2006) which is why it cannot be sufficiently understood from the positivist's stance (Schwandt et al. 1994). Every human being is unique and every part of social life has its own meaning, feeling, intention and motivation. This ontology takes a holistic and systems perspective, which sees everything and everyone as interconnected (Taylor and Medina, 2013).

Interpretive epistemology requires the researcher to be much closer to the situation, preferably immersed within it and, in effect, to interpret life through the eyes of those being observed (Taylor and Medina, 2013). In fact, the process is really an engagement between the researcher and participant(s), whereas in more positivist approaches, the researcher ‘contaminates’ the subject as little as possible (Schwandt et al, 1994).

Interpretivism addresses human understanding at a deeper level than positivist epistemology does. Interpretivists believe that our knowledge of the world is limited by the conceptual frameworks and language that have been. They reject positivist-type causal explanations and seek rather to understand the human situation through meanings, intentions and actions. Rather than the positivist emphasis on what is generalisable and universal, interpretive epistemology focuses on what is unique and particular about each and every human situation

(Lincoln and Guba, 2013). Adopting the interpretivist position adds potential strength to the overall approach to my study in the following ways:

- The potential to understand reality as it is perceived and experienced by people as it relies on the participants' views of the situation being studied (Creswell, 2003, p.8)
- It picks up patterns and configurations of social phenomena that might escape the positivist working in a more structured way, with a discrete and limited set of variables (Mertens, 2005)
- It has the power to explore at a deeper level and use researcher insight and experience of behaviour, as well as allowing them to deviate from the script where appropriate (Lather, 2006)
- It provides an alternative perspective to the positivist emphasis on prediction rather than understanding (Lather, 2006).

There are potential weaknesses within the interpretivist paradigm, however, that should not be overlooked. In essence, these potential weaknesses are a mirror image of its strengths. By seeking deeper understanding, its scope is necessarily more limited. Because the researcher is expected to become immersed in the social situation being studied, the possibilities for researcher-influenced results (i.e. contamination) are greater than with positivist research (Schwandt et al.1994). Deception on the part of participants would also expose weaknesses in this approach, which relies so heavily on an authentic reading of human meaning and intention. Finally, there appear to be fewer clear, well-established criteria for evaluating the quality of interpretive research, although a great deal of progress

is being made in the refinement of qualitative research methods (Lincoln and Guba, 2013, Schwandt et al. 1994).

That said, this research sits very well within the interpretivist paradigm which adopts the position of interpreting why people do what they do. This interpretivist stance carries the following implications for my research:

- The adoption of an exploratory orientation, one that tries to learn what is going on in the particular situation and to arrive at an understanding of the distinctive orientations of the people concerned
- The data should be structured as little as possible by the researcher's own prior assumptions.

At first glance, the research design could be confused with experimental or positivist design because it initially appears to be experimenting with variables e.g. replacing the paper-based process with technology. However, the interpretive nature of the research seeks to elicit the views of the respondents and to describe their experience of APEL when using the technology solutions in relation to the barriers previously identified. Their views will describe the aspects of the technology which reduced the effect of the barriers and how such technology could be further developed to support APEL. Therefore, the research is not testing specific technology solutions *per se* but its results could be used to inform future research which may test a number of technology solutions.

Author Assumptions

The nature of my research was exploratory in that I was not testing some pre-formed hypothesis and performing some experiment through which to prove this. Rather, I set out with an objective mind-set to ascertain whether barriers existed and try to understand their nature from the views of those taking part in APEL, as well as to understand ways in which technology may overcome these. That said, it would also be impossible for anyone to approach their research without having formed some opinions, assumptions or preconceptions, and I had made several, as follows:

- My overriding assumption was that, for there to be such a disconnection between the rhetoric and reality of APEL adoption, I was not looking at a single category of barrier but probably several acting on different participants in different ways.
- As demonstrated within my literature review, the volume of APEL literature, whilst growing, is still relatively small, and that which is aimed specifically at barriers to APEL is smaller still. Whilst this literature did shed light on possible barriers and provided a useful starting point, these barriers would not necessarily be the reasons for low adoption rates within my own institution, so this would need investigation in this research.
- Although I would need to confirm which barriers may be in place, there would be certain categories of barriers, e.g. those concerning some APEL rules, that were going to be beyond the scope of this investigation. For example, from the literature, I discovered that rules concerning the amount of credit which may be awarded may be acting as a barrier to wider APEL adoption. Such a

barrier is more a policy decision for the institution than one which a technology solution may help overcome.

- Despite the range of difficulties in implementing and practising APEL, it remains a force for good, with continued policy support, so would continue to be available into the future.
- There are practical benefits associated with APEL for both the learner and the institution, but these were not being realised. Therefore, any research which looked at positive ways in which barriers could be overcome would be favourably received.
- There was not enough information, advice or support available for staff or students to make informed choices about whether the APEL route was available or appropriate. Conceptual confusion among staff and possible limitations of APEL due to institutional rules may be a result of this.
- The timing of when APEL is introduced to a student is critical for them to gain the most out of it. The more this could be introduced as a process before or around enrolment would be crucial to avoid current issues of gaining APEL several months into the course.

Research Ethics

This section outlines my approach to the issue of ethics and the considerations I have made to ensure the integrity, safety and anonymity of the data and participants. I have divided this into two key sections, considering:

- Risks and Safety
- Data Protection and Confidentiality.

Risks and Safety

For the researcher, there were no special considerations to make concerning risks or safety in this study. The research was to be taking place in office or classroom environments within the institution and the researcher was familiar with the institution's safety procedures. All of the participants were either current students of the institution and, as such, had already received a full induction to the safety procedures, or staff who would have received such training as part of their induction. The focus group session students participated in took place in one of the institution's meeting rooms and a member of staff was present at all times. During the course of the research, participants required the use of a computer to facilitate use of the software. A training session was offered to all student participants ahead of the Main Research Study to ensure they could participate fully in the research. For staff members, interviews took place in various meeting rooms across the institution, which were equipped for this purpose. Staff also required the use of a computer for their part in the research and training was again offered to support their participation. There were no other risks or safety issues which could affect the participants in any way.

Data Protection and Confidentiality

Data were collected in several ways throughout the course of the research. All of the interviews and the student focus group session were audio recorded alongside my handwritten notes to ensure I had an accurate record of the sessions for later transcription and analysis.

The audio recordings were taken via a digital pen recorder and uploaded to my personal computer. Once I was satisfied that the data had successfully transferred to the computer, the original recording was deleted. The data on the PC will be stored until the thesis is published, after which it will also be deleted. In the meantime, the PC is security protected and backed up. In the case of losing the password, the IT manager can also retrieve this, should it be required. Only the researcher and the IT manager have access to the password database.

The files from the audio recording and the digital version of the field notes can only be accessed using a computer software program. This helps to ensure the anonymity of the data. At the same time, the field notes are anonymised so that specific individuals cannot be identified from them.

As the research is concerned with students making actual APEL claims, the software application is used to do this and, as such, personal data about individuals and their experience are stored on the software application system to facilitate the actual claims process. Tutors helped me to identify the individuals to invite to participate from the group who were about to make APEL claims. For the purposes of the claim, several members of staff, e.g. the tutor, HE manager and members of the HE directorate, all have access to the claim for various business purposes. It is therefore possible for participants to be identified and details of their claim known to those staff with access to the system. The system is designed with data access security and hierarchy in mind, however, and only

staff with relevant authority can access data within it. For example, tutors cannot view the claims being assessed by other tutors. HE managers can only view data on the students within their department. Only the system administrator can view all records within the system. As the data from the interviews are anonymised, even if this were compromised in some way, these data could not then be linked to data within the software. In this way, all reasonable steps have been taken to ensure the integrity and protection of data collected for this research.

In designing this research, I approached the institution with my research proposal to gain permission to undertake the research and involve staff and students as participants to inform the research. The permission was gained on the basis of the research not hindering the daily business of the institution and that it was made clear to potential participants that this was purely voluntary.

Both conditions were perfectly reasonable to me and the participant selection was carried out in the following way:

- An initial email (see Appendix 5) was sent to HE managers outlining the purpose of my research and asking whether they would be interested in volunteering for the research.
- An important aspect of the research was to ensure staff at both levels of hierarchy were involved so that all aspects of the software application could be tested. Therefore, I did not approach tutors until I knew which HE

managers wished to participate. I was really encouraged that all the HE managers expressed a desire to be involved.

- Following this, I sent out an email to all HE tutors (see Appendix 5) outlining my research proposal and asking for volunteers from those who would be supporting new APEL claims the following term (i.e. January 2014 – March 2014). Responses from the tutors wishing to take part were received by email and (given the limited number) all were included.
- Student participants were identified by the tutors. Again, it was important that students were selected on the basis they would be undertaking an APEL claim and that their tutor and HE manager were also taking part. I developed an email for tutors to send to their students (see Appendix 5), which I was copied into, inviting them to participate. This outlined the terms of the research and the commitments and requirements of the students. It also detailed my approach to data security and confidentiality.

I was keen to ensure that all participants knew of the right to withdraw and made this clear via the invitation email. I also made this clear verbally at the start of the student focus group session and staff interviews. As I have now left the institution, all of the consent emails have been stored in an archive and will be securely stored for seven years under the institution's IT Policy. I will be able to access these with permission of the institution, on request.

All of the students invited to take part were employed adults. No specific additional needs or considerations were identified, either through the initial

student recruitment process or the invitation email and, as such, I considered all participants able to give their own informed consent to participate. All staff and the research have been cleared through the required Disclosure Procedures. The Open University Human Ethics Committee approved this research in June 2012. Details, if needed, are available from http://www.open.ac.uk/research/ethics/human-research.

Conclusion

This chapter has discussed the theoretical model governing my overall approach to the research and the ways in which the data collected will address the research questions. I have discussed ethical issues affecting the research and its design and also briefly discussed the research design, although the three main stages of the research are discussed in more detail in Chapters 4 and 5.

Chapter 4 Preliminary Research and Pilot Research

Introduction

In this chapter I discuss:

- the Preliminary Research which was used to identify current availability/practice of APEL and the existent of barriers
- the Pilot Research which was used to confirm the barriers I had identified and design the prototype software application and website.

Preliminary Research

As demonstrated in the literature review chapter, the volume and range of research concerning barriers to APEL is by no means conclusive. That said, I believed it was still necessary to conduct Preliminary Research acting much like a feasibility study (Polit et al. 2001) in order to produce themes for the present thesis and to inform the design of the Pilot Research. This comprised two stages, as follows:

Stage 1

The first stage was a small-scale study in the form of a telephone survey, which involved contacting a range of HEIs across England to establish their current APEL usage. The purpose of this survey was to gain some initial understanding of APEL use to determine whether the perceived lack of uptake of APEL,

identified in my literature review, existed beyond my own institution. The survey comprised four basic questions:

1) Do you currently offer APEL?
2) What is your current process/model for supporting APEL?
3) What proportion of students currently undertakes APEL?
4) Do you charge any fees for APEL?

In all, 40 institutions were contacted and 23 were willing to participate. Each of those surveyed was made aware of the purposes of the call, in relation to my research and were assured anonymity. The sample of HEIs contacted was representative of the range of types of institutions offering higher education and comprised both traditional long-established institutions as well as newer institutions from the former polytechnic sector.

Feedback on the questions was rather mixed. For example, one university did not seem to know about APEL at all, despite repeated ways of describing the process. Another, on the other hand, has an APEL procedure but does not publicise it on their website and waits for students to enquire. Two of the institutions have very elaborate methods of calculating Accreditation of Prior Learning (APL) credit rather than APEL credit, for example:

> ‘where a student (without a useable transcript) has imported the maximum 300 credits towards an Honours Degree of Bachelor, including 60 credits towards Stage 3, the Board of Examiners will assess whether the student has achieved at least 40.0% in 40

> credits at Stage 3, and at least 35.0% in the other 20 credits, or at least 40.0% in 40 credits, and at least 25.0% in the other 20, provided the average over the 60 Stage 3 credits was at least 45.0%. In determining the Degree classification, the Stage 3 average would be calculated over 60 credits' (quotation from an institution guaranteed anonymity).

The results of this investigation highlighted that, whilst most of the HEIs that took part stated they had APEL policies in place, there was significant variation between the policies and their application. There was little or no consistency between the policies despite the universities offering similar awards e.g. Bachelors and Masters degrees. There also seemed to be some confusion or lack of understanding about the differences between APL and APEL as per the example quoted in the previous paragraph. The HEIs had little or no information about the overall proportions of APEL claims in relation to the student cohort, but in all cases I was advised that it is very low. These issues, together with the lack of valuable statistics on overall numbers of APEL claims, made any valuable comparison among the HEIs in the sample impossible.

Although this was a very small-scale survey with obvious limitations in terms of the overall generalisability of the results, the data do point to an overall lack of consistency and low uptake of APEL among those who took part. That said, this part of the Preliminary Research and indeed my research overall were not designed with the aim to make specific claims about the overall take-up of APEL

but rather to establish whether there is a case for further investigation of the apparent lack of take-up and whether any barriers exist to wider adoption. This stage of the Preliminary Research adds further confirmation to my view that APEL is not widely adopted.

Stage 2

The second stage was conducted within my own institution and comprised a small-scale investigation in the form of a meeting with tutors and managers to ascertain their current APEL practice and identify potential categories of barriers for further investigation.

The APEL process (summarised in Table 3) involves dialogue between the student and the tutor which occurs in meetings between them or via email. The overall time to compile a claim can take several weeks depending on a number of factors such as: the amount of credit being claimed, the availability of evidence and the academic level.

Table 3: The APEL Process

Students	**Tutors**
• **Consider** the learning outcomes of their desired qualification or module • **Reflect** on their own experience in order to produce evidence	• **Consider** the evidence and statements submitted in relation to the learning outcomes

Students	Tutors
which demonstrates these learning outcomes or module aims • **Collate** the documentary (or other) evidence which they wish to be considered towards their claim • **Write** supporting statements to demonstrate how they believe their evidence supports the requirements of the learning outcome • **Submit** evidence and statements to tutor for assessment	• **Assess** the extent to which the evidence supports the statements and learning outcomes • **Provide** feedback on quality, level and quantity of evidence • **Make recommendations** to students for further evidence where this does not meet requirements • **Make recommendations** to academic boards (in this case the APEL Board) where they feel the evidence meets the requirements for credit

There were 19 attendees at the meeting with at least one representative from each school present. The meeting was conducted in an informal manner (with refreshments etc.). Using a semi-structured approach, this stage was concerned with gaining the views of staff on their current APEL practice, the advantages and disadvantages of APEL and the barriers which existed to greater take-up of APEL across the college.

The meeting was audio-recorded and I also took field notes to assist with my analysis. The data were analysed using thematic analysis which carries greater reliability than other text/audio analysis methods such as word-based analysis (Guest et al. 2012). This is because, rather than simply looking for the existence of words which may lack context, thematic analysis involves 'identifying and describing both implicit and explicit ideas within the data, that is, themes' (Guest et al. 2012, p.9).

The analysis of these data allowed me to categorise the responses into a number of broad themes for further investigation. The first theme concerns **bureaucracy**. All staff were concerned that the overall process of APEL was both bureaucratic and time-consuming. They reported that the process of building a claim, i.e. gathering the right supporting evidence and conveying this to the student, was extremely time-consuming as this all had to be done on a face-to-face basis. The paperwork itself could then become quite bulky to manage and store.

The second theme (related to the first) is about **confusion**. Staff felt that they found the whole process confusing and, as such, so did their students. The overall weight of evidence and the forms required to manage the process made staff feel this was an option they would rather avoid.

The third theme concerns **process** (again related to the first theme). Staff felt the overall process was not very clear or easy to follow in terms of building the claim

or in assessing the evidence. Here there seemed to be a number of variants to the written process. Staff in the more technical disciplines (Science, Engineering and Computing) were applying APEL to whole units or levels, whereas other departments were applying APEL at a much more granular 'learning outcomes' level, which is the formal institutional policy. These differences were justified on the basis of candidate need and will be examined further in this project.

The fourth theme concerns the **grading and rating of evidence**. Staff were concerned that, under the current rules, students gaining APEL for a module can only gain a Pass grade at best for their evidence. Staff felt this unfairly disadvantaged the students with significant experience who could produce high quality evidence. As such, many staff actively discouraged students from claiming APEL but promoted the opportunity of higher grade possibilities through the traditional assessment route.

The fifth theme concerns the **amount of a qualification that can be claimed**. Staff were concerned that, under current rules, students could only gain accreditation for 50% of the programme, even where their volume, nature and quality of the evidence could allow for a more substantial claim to be made. At least half of the staff interviewed felt this put some students off claiming at all, whereas others felt that some form of teaching and traditional assessment were necessary.

The sixth theme concerns **support**. Many staff felt that they had little or no training in APEL and as HE teaching staff were supposed to just get on with it. Some staff felt this left them unable to actively promote APEL as they 'did not know enough about it' (tutor quote). Others felt that it was easier to 'get students to do the course', than go through the process. Some staff felt that they were not equipped to judge the quality of the evidence as being at the right standard or to apply it to a particular level.

The seventh theme concerns the **amount of credit and the level of credit.** There was a lack of formal procedures and published guidelines for students and staff on the type of work experience which would count at a particular academic level and the overall level of credit to award to it. Staff felt particularly unclear about how to judge whether the evidence provided by the student met the learning outcome criteria. They also felt that they had few or no guidelines to help them determine which academic level the evidence may receive credit for and how many credits may be awarded at the level.

These themes helped me to understand the main barriers affecting the wider adoption of APEL within the institution. On further analysis, it is possible to place these themes into two distinct categories, summarised in Table 4 below. The first category concerns rules, i.e. the rules which govern whether or not APEL is possible or how much APEL can be awarded. The fourth and fifth themes both fall into this category, as the awarding organisation has the authority to change the rules but does not require any procedural or system change. These themes

will not be addressed further by this research, although the institution will address them separately.

The remaining themes are those which fall into the category of administration. They concern issues about clarity of process, procedure, assessment, training and ease of use and as such lend themselves more readily to a technology based solution given that they are more related to process and procedure.

Table 4: Thematic Barriers

Administration	**Rules**
Bureaucracy, time-consuming, lots of paperwork	Grading and rating of evidence
Confusion	Amount of qualification that can be claimed
Unclear process and misapplication of process	
Lack of information, training and support	
Amount of credit and level of credit that can be claimed – lack of published guidelines	

Pilot Research

The themes identified in the above Preliminary Research were considered as I made my decisions about how to approach the next stages of my research. It was clear that I would need to design, develop and test a technology solution. I decided that a Pilot Research would be an appropriate next step as this would allow me to test my research instruments (Baker, 1994) and provide advance warning of possible difficulties I might run into. The words of de Vaus (1993, p.54), 'do not take the risk. Pilot test first', were ringing loudly in my ears. This Pilot Research comprised two distinct stages:

- The first stage was the design and development of a prototype software application for APEL to address the key themes outlined in Preliminary Research. It was essential to design an early version of the application for APEL so that participants would be able to provide feedback on the types of features they felt could help overcome the barriers previously identified.
- The second stage was to actually develop and use the application (in a facilitated session supported by me) and gather data from participants for further analysis and to inform the final research design.

Stage 1

In order to inform design, as well as to develop and test the prototype software application, I decided that it was important to include both students and staff in the process. However, I felt it was necessary to keep staff and student sessions separate for a number of reasons, mainly as a result of the earlier sessions in which I identified some of the possible barriers. There was a distinct possibility

that students may feel intimidated by staff with superior knowledge of the process and as such not contribute to the requirements as fully as they might if staff were not present.

For the students, I decided that a focus group was the best approach. Focus groups are advantageous because they allow respondents to be involved in the decision-making process (Race et al. 1994) and to feel valued. The opportunity to work with researchers (Goss and Leinbach, 1996) is potentially empowering (Kitzinger, 1995).

The group comprised eight students each taken from the part-time cohort rather than the full-time cohort. The main reasons for this selection is that the part-time cohort is generally made up of adult/mature students who are also in work whereas the full-time students in the college are generally 18-19 years old with relatively little or no work experience. Given that APEL requires claimants to have work-based experience to be able to apply to their programme, it was more practical and feasible only to include part-time adult students. The gender mix of each group was 50/50 with a wide age range between students in their mid-twenties through to mid-forties.

The selection process was open and took two forms. The first was that each school within the college was invited (by email) to recommend students to volunteer, and the second was a general communication (posted onto the home page of the Online Learning Environment and via email) to all students who fell

within the selection criteria. I was also aiming for at least one participant from each school in the college in order for me to gain as wide an input as possible (from a subject perspective). The general communication yielded very few volunteers, perhaps reflecting the fact that many students either did not read the email or they ignored it because they were already quite busy with work and study. I therefore had to rely on students recommended by staff. The potential for subjectivity is perhaps greater with this selection process, but equally the use of 'volunteers' that had been selected by staff could also be advantageous, as the staff would explain APEL to the volunteer students prior to the meetings.

Focus groups can have the effect of small numbers of people domineering proceedings which 'may influence what others are willing to say' (Morgan, 1993, p.77), so great care was taken to ensure that all the students were given the opportunity to contribute. This strategy involved regularly asking all members of the group to input their views. Where students were being quiet, I asked them direct questions to ensure they had the opportunity to contribute. The dominant participant problem, however, did not prove to be a particular issue and all of those involved contributed well to the overall discussion. At this stage, I also gave the students the opportunity to participate in the second phase of the Pilot Research, i.e. to use the prototype system and to provide feedback on this, and all agreed they would.

Staff input came from teaching staff and comprised volunteers from each school who were recruited from the staff currently teaching the programmes to be used

in the pilot. The staff were under no obligation to take part and were asked to participate on a completely voluntary basis. A meeting was held in each school and seven meetings took place in total. Each meeting had at least one representative from sections from within each school, so the numbers varied depending on the size of the school itself. The composition of staff from the schools was as follows:

- Creative Industries 2
- Business and Enterprise 2
- Construction 1
- Lifestyle Academy 2
- Computing 1
- Applied Science 2
- Teacher Education 2

Although these meetings were semi-structured to allow for freer input, I also used some visual aids in a diagrammatic format in the hope of ensuring the meetings would remain focused on the actual processes of APEL and the potential for deviation avoided, where possible. The main aid was a prototype process diagram (see Appendix 3) which was based on the existing paper-based process so that staff could visualise the process and agree the process as well as system requirements. Feedback from the staff was that this proved very beneficial as it enabled them to discuss the APEL process and focus on areas where improvements in the current system could be made.

During the process of gathering these requirements, however, there was a distinct view from a number of staff that APEL could not work in an online or technology enhanced way. This was by no means the majority view but there was sufficient feedback of this nature for me to investigate a little further where this arose and to test whether members of other schools felt the same. The main problem was that the staff simply could not visualise how such a system could overcome the bureaucracy and process issues described above or engage and support students through the process, without confusing them further.

My tactic of bringing the actual process diagram and some sample designs helped to overcome this, to some degree, and the meetings did conclude with the production of the functional and design requirements of the new system. That said, I also believed that, until the staff could actually see the prototype in operation, they would not fully understand what was being developed.

A key concern of both staff and students at this stage was to ensure that there was enough information for students to make informed choices about whether APEL would be suitable for them. Traditionally, it has been the role of the lecturer or tutor to 'offer' APEL to students only once they had enrolled onto a programme.

In setting their requirements for the new APEL system, both staff and students felt that the current way in which they were made aware of APEL relied too heavily on staff. They believed this awareness could be stifled either by the lack

of awareness of staff or even some prior staff bias against APEL. Both Merrifield et al. (2000) and Dismore et al. (2011) found lack of awareness among students was caused by similar lack of awareness or confidence among staff and significantly contributed to the low uptake of APEL opportunities. From this feedback, it was clear that, not only would the technology solution need to be able to overcome the procedural barriers identified such as bureaucracy, but that a means of raising awareness and providing clear and concise information would also be required.

The outcome of Stage 1 was the production of a list of functional requirements which I compiled from the responses of both the students and the staff. I would use these in Stage 2 to build the prototype technology solution which I would invite students and staff to test and provide feedback on. The functional requirements are listed in Appendix 4 and fell into two quite separate areas for consideration, namely 1) the provision of information, and 2) the process of building a claim. This stage also confirmed the suitability of the APEL process map shown in Appendix 3.

Stage 2

Once I had established the functional and design requirements, I spent July and August building the prototype technology solution which could be used by staff and students in the Pilot Research.

To satisfy the requirements for the provision of relevant information (the first three functional requirements), I chose to develop a website through which the students and staff could gain access to all of the information about the APEL process etc. A website was selected as this is a common method of providing online information and would be available 24 hours a day, should the students need this (Jobber and Ellis-Chadwick, 2013). I considered, but decided against, using social media as a dissemination method as this is not as widespread as the use of general websites and also because the institution has a restricted access policy on social media from college networks and this might adversely affect access at a time when I wanted to promote it (NCG Acceptable Use Policy, 2014). No such restrictions apply to general websites. Example screens from the website are included in Appendix 6. The website would act as a central information repository from which both staff and students could receive a consistent message about APEL and some of its benefits. The website could also act as a promotional tool to encourage potential APEL applicants to make claims (MacDonald, 2011).

The introduction of such a website would also have the opportunity of overcoming two of the procedural issues I had identified prior to my research. The first concerns the fact that some students can find that they have already begun to study modules that they may have gained credit for, had they known about APEL sooner and preferably before the course start date. The second issue is with the consistency of message, in that there were variances in practice across the

college. Creating a single source of information that all students could access could potentially help to overcome these.

For the remaining requirements concerning the process of building a claim, I chose to use an ePortfolio application as the basis for the solution, which I adapted significantly to ensure that the students could follow the APEL claims process. A portfolio system was selected for the prototype, as I could easily access and customise such a tool without the need to build a bespoke system.

The use of gamification techniques (Deterding et al. 2011) is the use of electronic game-based mechanics for non-game activities such as learning. E-learning has used these techniques for many years for providing features such as feedback (Flatla et al. 2011) and helping students feel more ownership and purpose when engaging with tasks (Pavlus, 2010), and similar techniques were employed within the software application design. This approach is appropriate for my research, as time was restricted and I needed to be able to test the technology as well as develop it. Example screens from the software application are included in Appendix 7. Both the website and the portfolio systems were developed making use of appropriate accessibility standards (Jobber and Ellis-Chadwick, 2013).

Students who had previously contributed to the design requirements were invited back (via email) to participate in a session to try out the APEL website and software application. Eleven of the original 16 participants were able to take part in this next session. The session took the form of a demonstration of the APEL

application then a simulation in which the students were invited to follow the steps to compile an APEL claim, using the prototype online APEL application, by reflecting on their work practice in relation to the learning outcomes of the course. The whole session was designed to last for about two hours.

I arranged three separate meetings for staff to ensure all of those who had taken part in Stage 1 could also test the prototype website and software application. All 11 staff from Stage 1 were able to participate and this provided a rich source of feedback. The key purposes here were to test the design of the online APEL applications in terms of the way in which they met the functional requirements, as well as to identify and rectify any errors or issues which problems users may have experienced to inform the final research design. A major part of this process was to be present with and observe the staff and students as they used the website and software application and note questions and issues as they arose. In this way, I was then able to determine any further refinements or changes required to either system before the Main Research Study.

There was little feedback on the website itself save for some spelling and formatting errors. I had expected the students to offer some criticism but, as this did not arise, I put this down to the fact that they were already familiar with the APEL process and so may not spot the types of awareness issues someone less familiar with it may spot. I therefore made only superficial changes to the website.

Feedback from the students

Student feedback about the software application was more detailed and concerned the process of building a claim. In particular, there were difficulties in understanding the process of building evidence to support a claim and then submitting the evidence for the tutor to assess. The online process (during the Pilot Research) was in three stages:

- The student reads the learning outcomes and evidence requirements and selects appropriate units or learning outcome(s) for which they wish to submit evidence
- The student compiles necessary documentary evidence and uploads this to the online application, which then links the evidence to previously selected learning outcomes
- Finally, the student writes a supporting statement on why they feel the evidence meets the unit or learning outcome criteria.

Once done, this is then saved so that the student can continue to build the claim by adding more evidence.

Some of the students felt that it was not clear from the online application whether they had simply compiled their evidence and linked it to the learning outcomes or whether it had been submitted to the tutor for assessment. There was a suggestion from a number of students that the evidence be automatically submitted to the tutor. I explained that there were problems with this approach because the student needs to compile evidence against *all* of the learning outcomes for a unit before submitting it. Submitting only part of the evidence

may lead to confusion in another part of the process, as large amounts of incomplete evidence would be passed to tutors. The submission should therefore be a definite step in the process, in order to maximise clarity within the process.

Non-automatic and non-immediate submission was, however, potentially a huge problem as it could result in a lot of evidence residing within the software without formally being submitted. I suggested that a remedy to this could be the use of on-screen indicators, such as ‘added’ and ‘submitted to tutor’. These could be added next to each unit and learning outcome to display the status, so as to better inform the student. (The categories of ‘accepted’ and ‘deferred’ were already present). I tested this suggestion with staff during their meetings too and, following positive feedback from both staff and students, I made the necessary changes to the software application.

Feedback from the staff

The staff interface of the software application was designed to provide a home page so that staff could see a list of the students they were supporting and select these students from this list.

Feedback on this feature was on the whole positive. Although the list was only populated with a small number of students, the staff using the system reported that they could see how this could be used for identifying the number of students they were supporting. Most tutors said that they felt this was a distinct advantage over the previous paper-based system, which did not provide them with any

overview of the students unless they kept a separate record (which was not always the case).

In terms of receiving evidence, assessing the evidence and providing feedback, the software application was designed so that staff members needed to select the appropriate student from the list. This would trigger the application to open the student's record which would display the student's name and ID number as well as a list of the learning outcomes for the specific programme. The tutor could then identify the current status of the claim by means of an indicator on screen adjacent to the description of the learning outcome. Different colours determined the current status, as follows:

- No Colour – No evidence submitted
- Green – Evidence received and accepted as meeting the needs of the learning outcomes
- Orange – Evidence received and awaiting assessor action
- Red – Evidence received but rejected as not meeting the needs of the learning outcomes.

This raised an important issue for staff as, until the moment they opened the application and then the students' records, they had no way of knowing which students' work needed assessing. I suggested two possible solutions to this. The first could be to change the display of the student's name on the home screen to a red colour to indicate that evidence had been received and not assessed. The second was to set up an email communication to notify the staff

member upon receipt of a student submission. Both suggestions were met with a positive reaction from staff and these amendments were made to the software application.

Conclusion

In this chapter I have described the design and outcomes of the preliminary and pilot stages of my research. The next stage was to finalise the design of the main research and carry out agreed changes to the website and software application ahead of this. The next chapter describes the design of the main research study.

Chapter 5 Main Research Study Design

Introduction

This chapter describes my approach to conducting the main research study and discusses:

- the participant selection process and the training of staff and students on the software application, prior to them starting their claims
- the methods used to gather data following the students' use of the application to make their claims
- the data analysis methods.

Participant Selection and Training

The main research study took place between January 2014 and May 2014. In line with interpretivist tradition, my intention was to observe the use of the website and software application in as close to natural conditions as possible rather than try to conduct this via a simulation (Kemmis, 2006). This meant that I needed to try to identify new students (with potentially genuine claims) to take part rather than those who started in September 2013, as they would have already completed a full term. The cohort starting January 2014 were therefore selected and, in line with the Pilot Research , part-time adult students were particularly sought as they were more likely to have experiential evidence. Unfortunately, this meant that the students who had taken part in earlier parts of my research could not be included in this stage as, by this time in the academic year, they would have already completed one term of study.

I invited staff from all schools in the college to identify potential participants with whom I could make contact to ask if they wished to be included. Following this, I approached students via email to describe the research and ask them to participate in the same way as I had done in the Pilot Research. A key requirement for the student to take part was the cooperation of the tutors to also take part as they would also have to use the new software application to assess and manage their students' claims. Luckily, this did not prove to be an issue.

January has an inherently smaller intake than September in the college, but I was hopeful there would be enough students to conduct the exercise. In all, seven students were identified, from the following schools:

- Lifestyle Academy (Sport, Beauty) 2
- School of Engineering and Construction 3
- School of Health and Enterprise 2

The overall coverage was not as wide as I had hoped for but was enough to carry out the research. The students were invited to take part in a preliminary training session to confirm their involvement and for me to provide a training session, demonstrating the website and software application. I was careful at this stage to try to avoid being drawn too far into any questions concerning APEL itself, as obviously the website (as part of the research design) was being tested to examine how well students were able to gain sufficient knowledge about APEL to conduct their claims.

The staff supporting these students were also invited to a separate training session, during which I demonstrated both the website and software application. Again, I felt it was important that the staff and student sessions were separate in order to maintain student confidence and reduce any potential for their being intimidated by the greater knowledge of the staff.

During the period January to March, students and tutors were asked to use the online application to start building their APEL claims. (This was actually a six-week period from the last week in January to the first week in March.) I was available to provide any technical support, but the objective was to allow the process to occur as naturally as possible within the system. The students were therefore encouraged to submit their evidence and link it to claims. The tutors would then assess and provide relevant feedback via the online application.

Data Collection Methods

Through my Preliminary Research I identified a range of barriers which may be affecting the wider uptake of APEL within the college. Thematic analysis was used to further refine these categories of barriers within the pilot research as well as to develop the prototype software application and website. The task of the main research study was to collect data from students and staff who had used the new website and software application to develop or assess their APEL claims respectively.

In line with the interpretivist nature of my research, my focus was on natural settings so I was keen to keep the process of building the APEL claim as close to a natural experience as possible for the staff and students (Lather, 2006). Building an APEL claim is a highly reflective process which involves identifying and gathering appropriate evidence and then demonstrating how the specific evidence artefacts meet the standards of the specific learning outcomes being claimed. Evidence artefacts can be any verifiable material evidence, such as specific documents, reports or witness testimony, which can be proven to have been developed or produced by the claimant (NCG APEL Guidelines 2015, available on request). As such, I did not consider direct observation of the claims building process (i.e. sitting with the student or staff member) an appropriate means of collecting data, as is often the case in interpretivist studies (Livesey, 2006).

Instead, my strategy was to use semi-structured interviews and a focus group, conducted during the process of building and supporting claims. Gathering the data in this way would, I hoped, ensure that as the experience of building the claim was current, it would lead to more realistic data than those gathered after the event, when the memory starts to fade a little.

Data were collected from the students and the staff separately for the same reasons as I did this within the Pilot Research i.e. to ensure the students did not feel intimidated by the staff. The student data were collected via a focus group

activity, and data from the staff were collected using a semi-structured interview format.

Student Focus Group

I conducted a focus group session with the students to gather their feedback. This mechanism had worked well for the earlier phases of my research and I believed it could work well at this stage too. As in earlier phases, I was careful not to allow any participant dominance and to ensure all parties had an equal opportunity to contribute (Morgan, 1993). The aim of the focus group was to discuss the students' views and experiences whilst conducting their claims using the website and software application. It was held in mid-March 2014 so that the exercise was still relatively fresh in their minds.

All seven students attended and the session was recorded via notes and a digital pen, which included an audio recording. The session lasted for two hours and was semi-structured in nature to allow the students to answer freely, although the questions were designed around addressing the key categories and themes highlighted earlier in the research. The questions asked were identical in nature to those asked in the staff interviews. In this way, I would be able to compare and contrast the data from students and staff and examine what this revealed. Although these students had not been involved in making an APEL claim before and therefore had no previous reference point to compare with, their view of both the process and how this was handled by the online application was still

important in understanding how or whether technology could help overcome the barriers identified earlier in my research.

Semi-Structured Interviews with Staff

The staff interviewed each had several years of teaching experience at Higher Education level but varying levels of experience in conducting APEL claims.

All of the semi-structured interviews were carried out on an individual basis. The same questions were asked of each staff member. Although I attempted to ask these in order, I allowed some deviation depending on the nature of the discussion, but ensured all questions on the interview schedule were covered. Each interview was recorded in the same way as the student focus group. The interviews were designed to last around 30 minutes with an allowance for up to 60 minutes, should this be required. It was important to gain the right balance between allowing enough time for the interviewees to respond as naturally as possible without feeling rushed into answers but also not taking up their time unnecessarily. On a more practical level, I was also asking staff to participate in their own time, which meant they would not have much more than one hour free within the work day between lessons.

The interview questions were designed to be as open ended as possible within a semi-structured framework. The open-ended questions would help ensure the specific views of each individual could be gained and therefore later compared using thematic analysis. The semi-structured framework was also important to

ensure the same lines of questioning were used, so as to gain some parity between the views obtained.

For each interview, I felt it would be a useful reminder to begin each session with a general overview of the research and its key purpose and design. I then reminded each interviewee of the key administration barriers and sub-categories identified from the Pilot Research (see Table 4 in Chapter 4) and asked them to consider each in turn, as follows:

- Bureaucracy, time-consuming, lots of paperwork
- Confusion
- Unclear process and misapplication of process
- Lack of information, training and support
- Amount of credit and level of credit that can be claimed – lack of published guidelines
- The information provided via the new website
- The process of building a claim
- The process of assessing evidence and claims
- The process of validating claims and awarding credit.

The staff were then invited to discuss each theme in terms of the online application compared to the previous paper-based system and the extent to which the barriers were being removed in any way. I completed the process of conducting interviews in May 2014. The process of audio recording, transcribing and analysing textual data is the accepted norm when collecting qualitative data

(Markle et al. 2011) and I decided this was the best form of data collection for the present thesis.

This would greatly enhance the quality of the data I could collect compared to field notes alone, and would allow for greater use of the participants' own words, when analysing the data (Markle et al. 2011). An audio recording would be a complete and unbiased record of participant responses, unlike field notes which are prone to error such as researcher bias and inability to fully recall all that was said (Canfield, 2011). Patton (2002, p.308) believed that 'the creative and judicious use of technology [could] greatly increase the quality of field observations and the utility of the observational record to others' without being obtrusive. Rapley (2007, p.50) aptly put this as follows:

> 'The actual process of making detailed transcripts enables you to become familiar with what you are observing. You have to listen/watch the recording again and again ... Through this process you begin to notice the interesting and often subtle ways that people interact. These are the taken-for-granted features of people's talk and interaction that without recordings you would routinely fail to notice, fail to remember, or be unable to record in sufficient detail by taking hand-written notes as it happened'.

The participants in my research agreed to my making an audio recording of the semi-structured interviews and focus group. I decided to use a digital pen with built-in audio recording. I have been successfully using such a device on a

regular basis for a number of years to take notes of meetings and store these for later use. The pen works on the principle that the audio of the meeting is recorded via the pen. Using compatible notepad paper, I can start and stop the recording via commands imprinted onto each sheet of paper. Whenever I write on the paper, the pen notes where in the audio recording I made the note. This process allows me to subsequently use the handwritten text to return to the exact place in the audio recording where I made the note. This feature was to prove invaluable and is discussed in the next section.

Hann (2008, p.82) describes the process of 'selective audio transcription' as the means by which to use technology, such as digital pens, to mark locations within digital audio files to 'jump' to these specific locations within the file. It was clear that this technology and approach would be ideal for my own study, so I adopted the use of audio recording via the digital pen whilst using field notes recorded via the same pen.

Finally, I also investigated the possibility of using computer-assisted qualitative data analysis software (CAQDAS) as a means of coping with the overall volume of work required for transcription (Fielding, 2000). I had heard of such software from a number of colleagues, but my own investigation showed a mixed level of success. I downloaded a number of such applications and installed them onto my computer to try them out prior to the data collection stage. In each case, I found the software to be unreliable, as I was spending as much time undoing incorrect transcriptions by the software as reading correct transcriptions. The

situation was made worse in group situations where whole parts of the conversation needed conventional transcription as the software could not cope with multiple respondents talking or with the range of voices.

Data Analysis Methods

Braun and Clarke (2006) discuss thematic analysis as one of the most popular forms of qualitative analysis. This offers the potential to interpret the data to infer the meanings I was seeking to identify. As a widely used form of analysis in qualitative research, the emphasis is on finding, examining and recording patterns (or themes) within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question (Daly et al, 1997).

Conclusion

I had used thematic analysis in an earlier phase of this research to establish the existence of barriers and to categorise them (Fereday and Muir-Cochrane, 2006). The analysis is performed through the process of coding in six phases to create established, meaningful patterns. These phases are: familiarisation with data, generating initial codes, searching for themes among codes, reviewing themes, defining and naming themes, and producing the final report (Braun et al. 2006). I have collected data from two distinct groups, namely students and staff supporting claims of their own students. It is important to examine the data from both groups separately to determine whether there are any categories of themes unique to one or another group as well as overall across the groups. For

example, the students may see a particular barrier from their perspective that the staff did not consider. In each case, I will provide key findings from the data following the order of the interview or focus group session, and from these I will discuss the emerging themes. I have presented these findings in the next two chapters.

Chapter 6 Findings of the Data Collected from the Tutor Interviews

Introduction

In this chapter, I present the findings of the data collected from the semi-structured interviews I held with tutors during the main research study.

For each question, I provide a rationale to explain its purpose and my reasons for asking, followed by a description of the findings. In presenting this together in this way rather than in separate chapters, I aim to provide clarity for the reader. Each tutor was asked the questions in the same order.

There were two parts to each interview. In the first part, I asked three general introductory questions concerning participant views of APEL. The second part involved questions relating to the specific categories of barriers identified in the preliminary and pilot studies. In this way, I hoped to understand whether there might be any link between their views of APEL and their subsequent management of it via the software application in this study.

Introductory Questions

Please tell me about your views of APEL and, in particular, what you see are the main advantages for both the student and the institution?

The purpose of the question was to understand from the tutors' perspectives their views about APEL and, in particular, any advantages or disadvantages to individuals or the organisation in offering APEL as a route to gaining credit.

Gaining an understanding of the views of staff towards the advantages and disadvantages of APEL was important for a number of reasons:

- The first relates to initial take-up. Despite the apparent existence of a number of barriers identified in my Preliminary Research, if staff hold negative views about APEL or about the perceived advantages APEL can offer, this in itself may be a barrier, as staff holding such views may not bring APEL to the attention of their students in the first place.
- The second relates to support. Whilst some of the barriers identified earlier concern the overly bureaucratic and process intensive nature of APEL, staff with positive views of the advantages may not see those barriers as being as onerous as those with more negative views, and their support may therefore be somewhat different.
- The third reason relates to my research question. My earlier studies and the literature review concluded there was a widely held view that APEL was a good thing for both the student and the institution. Despite this, APEL is not widely adopted. Therefore, understanding staff views of the advantages and disadvantages of APEL may help me gain an understanding of whether the

original proposition is still correct (or have it reaffirmed), albeit in a small-scale way.

The overwhelming response from the staff was that they could see a range of advantages to students and the institution.

Advantages and Disadvantages of APEL for the Students

It was interesting to see the variety of ways in which the staff described what they perceived to be the advantages and disadvantages for the individual student. Whilst various terms were used, these can be categorised as relating to time and money.

Time was the clear front runner and was identified as the main advantage by all staff. A variety of comments from staff such as ‘not wasting their time’ (meaning students), ‘can gain credit quicker’ and ‘fast tracking’ were used. The view of time saving across these interviews centred around four main areas.

The first concerns timing of the claim itself. The Preliminary Research identified that time was a clear issue, particularly if the student started the course and subsequently found out that they could have been awarded credit for modules they had already started. Promoting APEL opportunities via the website prior to enrolment and allowing the process of APEL to begin before the course start date were seen as clear advantages of the website and new APEL process. These, together with the introduction of monthly APEL Boards, were seen as among the

most critical steps to ensuring that students would start their courses knowing which modules they would be claiming credit for. In this way, the students' use of time could be maximised, rather than risking potentially disaffecting students, as happened in the paper-based process.

The second area relates to the exemptions gained by students who successfully claim for whole modules. Students in this position would not have to study those modules and would therefore have more time to do other things, such as other modules.

The third relates to feelings of not having one's time wasted. A number of similar terms were used for this such as 'gaining credit for what you already know' (Respondent 3), 'not treading water' (Respondent 4) and 'not wasting time on things you know' (Respondent 6). It was clear that all the respondents (R) were of the view that students should not have to re-learn what they already know and, provided they can demonstrate it, they should gain credit for that knowledge.

The final category concerns flexibility. This seemed closely related to the 'Time' response discussed above, though it was qualified as a separate response with a slightly different meaning. Whereas time was understood to mean overall length of time in study, flexibility was concerned with the fact that the students could build their APEL claim flexibly and outside of the standard timetable for their course.

The fee reduction policy introduced alongside this research, in which students' fees were reduced in line with each module they successfully claimed APEL for, was also seen as a distinct advantage. All of the staff (except one) described the potential for cost reduction as a significant step in attracting students. All of them cited the backdrop of the huge media interest in fees at a time in which the government had removed funding for many courses, replacing it with student loans. Although staff were aware that such loans would not need immediate repayment, the significant increase in fees as a result of the introduction of student loans would (they felt) make the fee reduction aspect of APEL more appealing. There was one member of staff who did not mention money at all and this did surprise me given all of the publicity in relation to fees in Higher Education at that time.

Advantages and Disadvantages of APEL for the Institution

Again, there were a range of responses on the institutional perspective although with a more limited degree of commonality between them. Unlike the advantages for the individual students, there was no view of an institutional advantage shared by all staff.

The views were focused at two different levels i.e. at the institutional level and advantages for the staff themselves on a more operational level. At the institutional level, the most common advantage (mentioned by four participants) was the opportunity to reduce the cost of delivery. By awarding credit for whole modules, the student also gains a reduction in cost for the module and therefore

staff believed this to be a great advantage over competitors who did not offer this route.

The creation of the website was also described as having two distinct advantages:

- The first was for the potential marketing opportunities of the website, which may help make certain courses more attractive if the benefits could be easily seen.
- The second was that it was seen as a single source of information so that staff themselves could also benefit from having the most up-to-date information on college policy and process, thereby reducing staff uncertainty, as described by Merrifield et al. (2000) and Dismore et al. (2011).

Another advantage for the institution (mentioned by three participants) was the introduction of more regular APEL Boards from once per term to once per month and a clear timetable of dates. They felt this would enhance the process by introducing more certainty of events. Linked to this was the management of the APEL process which would now be paperless. Not only would this be more cost-effective, but it would also potentially make the running of APEL Boards more efficient.

On a more operational level, the tutors felt that the online APEL assessment method would be advantageous in a number of ways. The first would be that the institution would gain a large repository of claims held within a single software

application accessible by all staff. Whereas all previous claims were paper-based and taking up a lot of physical space, holding them online in some way may help to make them shareable. The advantage in this would be that they could be more readily used to help future students see good examples of previous claims. Tutors also felt that the claims themselves would be more manageable within a 'system' because of the overall reduction in paperwork. Less storage would also be required as each paper-based claim comprised a significant volume of paper.

The second advantage concerned the assessment and feedback process. Although assessment is a time-consuming activity, this can be made less onerous if there is a single collection of evidence online rather than the myriad of pieces of evidence that are used in the paper-based process. The records of feedback would also be consistent and avoid unnecessary problems later if students disputed the advice they had been given.

What do you think is the main reason that attracts or motivates students to make use of the process of APEL?

This question is similar in some respects to the previous question, but the emphasis is different in a number of respects. Whereas the previous question focuses on general advantages and disadvantages that APEL may offer the individual, this question is concerned with staff perceptions of student motivation towards APEL.

Understanding staff perceptions in this way is important because, without an understanding of what most motivates students towards claiming APEL, it may be difficult for staff to convince them APEL is worth it. Comparing the results from staff and students was also useful to determine whether there were any differences in these views, which in turn may also be affecting take-up. It was interesting to note that the results for this question were broadly similar to those of the previous question. As this was about selecting one feature of APEL that would most attract students, respondents needed to think slightly differently to the previous question. The results showed that, whilst time and cost were still important advantages, staff were evenly split between the two (four for cost and three for time) suggesting, perhaps, that time and money are seen as being of equal importance.

Please tell me about your views of APEL and, in particular, what you see are the main disadvantages for both the student and the institution?

The purpose of this question was to understand staff perspectives on why students may not be attracted to APEL. Although the barriers for investigation were identified in the Pilot Research, some time had passed between their original identification and the Main Research Study and I therefore wanted to reaffirm these with staff, as well as using the opportunity to identify any additional barriers which staff may have identified in the meantime.

It was not surprising that all of the barriers which were previously identified were still considered relevant at this stage and these are summarised here. There are also two new barriers – student confidence and self-directed claims.

- *Bureaucracy* – still a major concern among most staff that the overly bureaucratic nature of APEL may continue to be a barrier despite any technical improvements on how this can be accessed and managed.
- *Time-consuming* – the overall time taken to conduct a claim may deter students from embarking on a claim because they may feel it would be just as easy to take the module instead.
- *Lots of paperwork* – will possibly be overcome in the online application but fears still exist that the process may not be able to be fully handled online and a possible hybrid system may ultimately be 'worst of both worlds' for students and be unattractive as a result.
- *Confusion over the overall process and award of credit* – If students do not have clear and upfront advice on this, then this could further hinder student uptake. Although the website which has been developed to help overcome this issue, there remains a concern from staff that the message may remain unclear.
- *Unclear process and misapplication of process* – similar to previous point that the overall process needs to be made clear for every stage of a claim as well as at the beginning via the website. In this case, many staff felt that students may simply 'give up' if they feel confused or unsupported at any stage.
- *Amount of credit and level of credit that can be claimed* – lack of published guidelines was previously identified as a potential barrier and although they

will be made available through the new website, they need to be easily identifiable and accessible otherwise students may not progress a claim.

- *The process of building a claim* – Some staff still feared that the overall process of claims building continued to be a potential barrier to uptake because the necessary 'steps to be learnt' by the individual. The fact that students would have to learn about a process other than just learning on the course may also affect whether or not they see APEL as an opportunity or not.
- *Student confidence* – This is a new potential barrier that was not identified in the Pilot Research. Some staff expressed concern that there would be a number of students who would fear that their experience may not be valued enough to gain credit and therefore result in wasting their time. This was added to this list of questions to be asked in the focus group sessions with students to ascertain their views towards this category.
- *Self-directed claims* – Self-directed APEL and problems in interpreting learning outcomes.

Views of the Staff about the New Online APEL Process

In this section I present the findings of the staff views about using the new website and software application for assessing and supporting APEL claims. For each of the categories of barriers, I asked the same question, which was:

Thinking of* (category of barrier)*, please can you tell me the extent to which the new website and software application helped to overcome this and in what ways?

Follow up question

Would you recommend any improvements to either the website or the software application that would help further overcome this barrier if it still exists?

My rationale was to discuss each of the barriers in turn with each staff member so as to understand their individual perceptions of each part of the system. I originally considered asking these questions about specific features of the website and software application which I believed may be important to the staff. However, I believed this may introduce too much of my own bias into the line of inquiry. I therefore decided to base the questions around the specific barriers the staff and students had identified in the preliminary and pilot studies. In this way, it would allow staff to respond in their own way, without being led by me.

At this critical stage in the investigation, I needed to be extremely careful to ensure that participating staff members were confident to provide objective views on the relationship between the categories of barriers previously identified and how well (if at all) the website or software application was able to overcome them. This may seem obvious at first but, as I had developed the technology solution, I needed to avoid situations where responses were based on what the staff felt I wanted to hear about the software application rather than their actual objective view.

Thinking of the barriers* Bureaucracy, Time-Consuming, Lots of Paperwork*, please can you tell me the extent to which you feel the new website and software application helped to overcome these and in what ways?

Although I initially attempted to question staff on these barriers individually, their responses did slip from one to the other suggesting quite a strong inter-relationship between them in the minds of the respondents. I therefore present these in a single subsection here.

From the responses to the interview questions, it was possible to identify a group of four staff who were keener to explore the possibilities of a technology based solution to managing the APEL process than the others. For the purposes of this section, I will refer to this group of staff as early adopters (Bates et al. 2007,) as they were the ones who were the most likely to want to use technology and adopt new solutions. The staff members (S) in this group appeared to have a much more positive attitude towards the possibility that technology may help overcome some of the barriers they had previously identified. 'The ability to keep everything in one place' (S2) and 'I prefer to use technology rather than keep lots of paper' (S3) were among the types of feedback that enabled me to make this distinction.

I have categorised the remaining three staff as cautious adopters, although they more accurately fall into Rogers' (2003) late majority category. This is not because they expressed any particular negative views towards the technology, but because they appeared a little more cautious and were not as overtly

optimistic about the extent to which technology alone may help overcome the barriers.

Early Adopters

Several staff (early adopters) expressed views that, although the software application was still in its infancy, they could already see tangible benefits for themselves and their students for overcoming some of the issues of bureaucracy in a range of ways.

The overall reduction in paperwork and storage was seen as a significant advantage among this group. Within the currently used process, a significant volume of paperwork is produced and wasted during the process of building a claim, which often results in the reprinting of documentary evidence or supporting statements. Notwithstanding any cost implications of this, once a claim is completed it can be a sizeable collection of documentation which needs to be stored for future reference and audit. This can mean a considerable number of sheets of paper are wasted for each claim. The online storage capability negates this and was generally seen by early adopters as a huge advantage.

Although the general process has not changed, early adopters did see some procedural advantage in the way the online system could be easily used to cross-reference claims evidence to multiple learning outcomes, as this was seen as a significant weakness in the paper-based system. Within the current paper-based

system, there was no way of cross-referencing the evidence in the way described earlier, and this often led to confusion for students and staff members alike.

The provision of a student ‘overview’, in which the tutor could see the status of all of the learning outcomes on one screen, was seen as a significant improvement over the paper-based system. The ability to see ‘at a glance’ the status of each learning outcome provided the staff members with a ‘quick and easy’ way of seeing what they had to do with each student, which was considered a distinct advantage.

Early adopters could also see some additional benefits to the software application for the process of handling APEL Boards. Within the paper-based process, each claim must be received by the Board administrator two weeks prior to the date the APEL Board meets to consider the claims. This allows the administrator to produce a paper-based copy of each APEL claim and copies of all of the supporting evidence, ready for distribution to members of the Board (up to 12 people). Papers must be received by Board members seven days prior to the meeting to give them enough time to read each claim and consider it. Once the Board has met, all but one set of papers (the file master copy) is destroyed at huge admin and paper cost to the college.

Within the technology solution, this process has been adapted to allow Board members access to the technology solution, thus negating any need to ‘produce’ any paperwork for the Board. Instead, the electronic record is available in the

meeting via a computer, and displayed on a large screen, which all meeting rooms are already equipped with.

Although none of the claims were actually considered by the APEL Board, due simply to the timing of the Boards in relation to the research, most of the staff suggested there were significant bureaucratic, time-consuming, paperwork and cost barriers overcome, which would be a significant institutional advantage in the future. Arranging the Boards, copying the paperwork, distributing it only to destroy it later would save a considerable amount of time and money for the organisation. Due to the electronic nature of the system, a possible future benefit could also be in the possibility of later submission deadlines, thus allowing students slightly more time to make their claims and staff to assess them. This would, however, require a change to the academic regulations and is outside of the scope of this study.

A number of recommendations for the future development of the website and software application also emerged from the early adopters during this process, as follows:

- The first relates to the page providing an overview of the student claim. All of the early adopters suggested that it was not entirely clear which modules a student may be attempting to claim credit for. This, they felt, could lead to some confusion from their perspective on how much progress the student had made towards completing their claim. For example, a module may contain four or five learning outcomes and it is relatively easy to see how complete

the progress is, because the staff member can use the on-screen indicators for this. However, there are often six (or more) modules on each of the courses, and a similar flagging system so that the modules being claimed are identified in a similar way on the screen would also make the process less time-consuming and more user-friendly.

- The second recommendation relates to the tutor home screen. On this screen, tutors are presented with a list of the students they are supporting but no other information. Again, all of the early adopters suggested that, as a staff member may be supporting several students at one time, they would benefit from seeing two additional pieces of information. The first was an indication of whether any of the students on their list had any evidence which was awaiting the tutor's assessment. The second was an overall status indicator of the percentage of completion or similar of the claim. These enhancements would then result in further process improvements for the tutor, as they would instantly be able to see whether they had any action to take rather than needing to view each student's record to see this.
- The final recommendation came from two of the early adopters (S1 and S2) for the management home screen. As course leaders within their department, they had some level of line management responsibility for the allocation of tutors to students and for the management of all the APEL claims within their course area. They suggested that those in a management position would benefit from a similar overview page to help manage tutor allocation (i.e. which students are allocated to which tutor) and that a similar overview to that of the tutors could be displayed to them on their home screen. In addition,

> they requested that, in order to manage the process and the tutors, a warning indicator feature, which could inform them when student evidence had not been assessed within the specified assessment period, would be extremely useful.

Storing all of the evidence in the online application as well as the supporting statements for the claim was also seen as a distinct advantage among this group. From an organisation of work perspective, tutors could (more) 'easily navigate and locate' documentation when compared to the paper-based system. More importantly, the documents could then be annotated by the tutor using the comments features of the word processor, which they could discuss with students via the feedback and dialogue features of the application, for example.

The tutors considered to be early adopters did not express difficulties in carrying out their academic assessment of the evidence or supporting statements, with the majority responding that it was their preference to work 'online' rather than with large amounts of paper.

The early adopters also said that the time-consuming nature of the APEL process could be significantly reduced through the online system in two ways. The first concerns the need for meeting and communicating with the students. The online application provided a single environment through which to host and manage the claim, resulting (in their view) in certain process and management improvements. It also provided an in-built means of communicating directly with the student. As

the paper-based system required (in the main) physical meetings between the student and the staff member, a great deal of time could elapse between meetings, due to diary clashes and so on. Although telephone and email were also available, the constant reference to paper-based evidence often made it difficult to hold productive meetings using such communication mediums. The online application was viewed by this group as helping them to overcome this difficulty by reducing the need for the majority of meetings without any impact on the student, because most of this could 'be handled within the system'. The early adopters went further at this stage, with the majority reporting that the overall management and communications could be much improved with more contact being 'encouraged' by the use of the system, leading to the possibility of students feeling more supported than within the paper-based system. The second improvement seen by this group was that, as the 'physical barrier of meeting' as in the paper-based system was potentially negated, the overall time from the start of a claim to its completion could potentially be significantly reduced. However, they placed a large caveat on this, by explaining that staff would still need time to assess claims so the time saving on that aspect may be fairly limited.

Cautious Adopters

Feedback from the remaining three staff was a little more varied. No one in this remaining group could be described as unwilling or opposed to the principles of using technology, or indeed the software application, to support APEL, but their views could perhaps be best described as more cautious and needing more

evidence to be fully convinced of the benefits. For this reason, I will refer to this group as the cautious adopters.

There were some similarities between the views of staff within the cautious adopter group and the early adopter group, especially concerning the propensity of the software application to overcome some of the bureaucracy issues, but there were also significant differences, which I present in the following paragraphs.

The cautious adopters could see the benefit in reducing the overall volume of paperwork, especially when presenting claims at APEL Boards. There was concern, however, that that some claims may still need to be accommodated outside of the software application, due to the type of evidence being used to make the claim. One staff member gave the example of where a student may produce an evidence artefact such as a piece of artwork or ceramics as a circumstance where the paper-based system may still need to be used. I asked whether an alternative method of viewing the artefact such as photographs may be used instead of viewing the original. The photograph could then be uploaded onto the software application. This was deemed acceptable in some circumstances, but the staff member remained convinced there may be other types of evidence that could not be accommodated so easily.

Another staff member also raised the issue of exceptions, and gave the example of a recent student who could produce documentary evidence but this was

handwritten in a series of notebooks. Therefore, whilst this was useful evidence which could be accepted as counting towards the learning outcome, it would be difficult to upload it onto the system. Due to the volume of the handwritten text, the process of scanning and uploading such a volume of material would be too onerous and time-consuming. I asked whether it would still be possible to manage the claim via the software application but reference the source information to where it was physically located. This was deemed acceptable, but cumbersome, by the tutor, who considered that it would be preferable to keep all of the information together. The tutor also stated that such issues would be rare exceptions but that they had occurred in the past.

As with the early adopters, the ability to cross-reference was seen by the cautious adopters as an extremely important feature, with the ability to considerably simplify a very cumbersome paper-based method. The student overview page was considered by them to be an improvement on the paper-based system and very similar recommendations to those of the early adopters, as listed above, were made.

The cautious adopters, however, had substantially different views of the potential for time savings to those expressed by the early adopters. The cautious adopters were generally of the view that more evidence would be needed to determine the correct balance between physical meetings between the staff member and the student and the online communications methods within the software application for managing the claims. Whilst they could see definite advantages in reducing

the overall amount of contact time, in a similar way to that described by the early adopters, their concern was that this could lead to a number of other difficulties, if not managed or handled correctly.

The first of these concerns relates to the nature of online communications and the feeling among these tutors that, whilst written feedback is required, this often needs to be vocalised in order to place the correct emphasis on the key messages of the feedback; otherwise, there is a possibility that this could be misinterpreted. I probed further on this issue, because written feedback is often the primary feedback tool within the college. The response was that, due to its nature, it is more difficult to explain in feedback in an APEL claim why a specific piece of evidence does or does not meet the criteria, than in an assessment task. All three of these staff members suggested audio recording as a possible means of overcoming the issue.

The second concern relates to time savings. The three staff could not see any evidence of time savings resulting from their use of a website or software application. There was an acceptance, however, that this is possibly due to the fact that the software application and online management process are still in early stages of development and that this could probably improve with time, when staff become more familiar with the systems.

The third relates to the potential for students feeling less supported than they might have done in the paper-based system. The feeling among these staff was

that they provided a very personal service to their students, through which they developed strong working relationships, and that the students benefitted from this quite considerably during the process of making a claim. The move to a fully online system may lead both to a feeling of de-personalising the process and, in some cases, to the student feeling quite isolated. I enquired with these staff why they felt that this may be the case. The overwhelming reason given by all three staff was that the student would have no personal contact with the tutor throughout the process of making their claim.

This was very interesting, as I did not make any stipulations at the start of the project that staff could not meet with their students. When asked about this, all three staff discussed their assumption that, as this research was about testing the capabilities of the website and software application, then meeting the students to discuss their claims was ‘not an option’, as one tutor put it. This was clearly a relevant issue and worthy of note for any potential future development of the APEL process within the college. It is also worth noting that all three staff members held the belief that there would always need to be a certain degree of balance between what could be achieved online and in person.

Interviews with two of the cautious adopter group revealed a further issue which I believe may have influenced their views, perhaps unknowingly, and concerns the amount of experience staff have in using APEL. As explained in previous chapters, prior to starting the research I took great care to ensure I provided an opportunity for training to all the staff and student participants, in which I

demonstrated the website and software application and how they should be used. The training took place in small groups and individually depending on the time commitments of the individual staff members and generally took between an hour and two hours to complete. All participating staff members took part in this training. My idea in conducting the training was not only to ensure that staff could use the online application but also to address any potential concerns they may have prior to starting the research.

I also offered staff the opportunity of support throughout the process if they experienced any difficulties with the online application. A number of staff did contact me for support, some on procedural matters and others for advice or reminders on specific aspects of the system. This was to be expected given the nature of the new system. What I had not expected, given that all of the staff involved were relatively well experienced HE tutors, was to identify a potential training issue among staff regarding their ability to assess APEL claims i.e. their ability to make judgements on the extent to which the evidence provided met the learning outcome criteria. When providing support to these two members of staff, it soon became clear from their questions that they had little experience of APEL, although they were quite familiar with the general concept. I made this connection because the questions they were asking began to move away from the more procedural ‘how do I link this evidence?’ to ‘how do I know if this is enough evidence to support this claim?’

It may be coincidence that these two members of staff were also in the category of cautious adopters. It does, however, point to a potential relationship between the level of experience (and possibly confidence) of staff and their attitude towards APEL, as the attitude of those with less experience may be significantly different to that of staff with more experience. Dismore et al. (2011) points to a lack of training among staff as directly affecting their attitudes towards APEL and especially promoting it as an option for students.

Thinking of the* APEL information website, *please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?

Prior to the research, students would have received all of their advice about APEL from the tutor supporting them through the claim. This information would usually have been transferred verbally in a meeting between the tutor and student. Whilst a formal APEL Policy document was in existence, this was generally regarded as a 'staff' document and the practice at that time was never to provide this to students.

For the technology enhanced APEL process to be successful, I had already gathered a number of functional requirements from staff and students in earlier phases of the research. From these, I determined that a lot of the information, advice and guidance as well as the APEL process itself should be provided via a website designed specifically for the purpose. The website screens can be seen in Appendix 6. Although it is not intended to replace the tutor, the website does

offer the students and tutors a single point of reference for advice about APEL and to log in to their claim. Information on the public facing part of the website is limited to general information about the overall offer, costs and a high-level overview of the process. When a student registers on the system and starts an actual claim, a lot more detailed information is then provided to support them through this process. This allows the website to also act as a means of marketing the APEL opportunities.

During the interviews, the cautious adopters described that they felt the principles of the website were sound in attempting to offer students the information, advice and guidance they might need prior to and during the process of a claim. Two of the more cautious staff were concerned, however, that the overall process needed further clarification. Whilst they could see that the website was attempting to market the APEL opportunities, there was a fear that this could potentially lead some students into believing that APEL might be an 'easy option', only to be disappointed later when the full knowledge of the process was made clear. More guidance on the actual process (they felt) may help to overcome this.

Similarly, some staff noted that the website did not contain any details of the process of how credit was actually awarded. For example, that an APEL Board needs to consider the claim and all of the evidence before any award of credit may be granted. These staff felt this could confuse students into believing that, once a tutor had accepted all of the evidence as (in the tutor's view) meeting the criteria for the module, the claim was completed, without them appreciating that

there were more steps in the process. Although staff were aware their role was also to provide this advice, they felt that the website should also make this clear so as to avoid any possibility of confusion and anxiety at some later point.

Thinking of the barrier **Unclear APEL Process or Misapplication of APEL Process,** ***please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?***

Five of the staff (all three cautious adopters and two early adopters) were concerned that the information about the process and all of the steps required to make a claim need to be consistent between that which is published on the website and that provided by staff. Lack of such information and consistency may lead to student dissatisfaction.

All of these staff said they had previous experience in the paper-based system where students had given up their claim part way through as it seemed to be taking much longer than expected and involved a lot more work than they initially thought, despite this being covered by the initial meetings staff had at the beginning of such claims. One tutor quoted a previous student as saying, 'if I'd known it would take that long and I'd have to produce so much, I do not think I would have bothered!'

The view from all the staff about the online application was that it may help students understand the process better, for two reasons. The first was because it

provides a constant source of information for students to refer back to. The website could be updated to store information about the process as well as describe it in more detail. This also could ensure consistency between staff and ensure all the students are given the 'same message', which does not always happen in the paper-based system. The second reason is that the website could be used to store examples or case studies of previous claims for students to refer to and, in doing so, help them to estimate the length of time and effort required.

Thinking of the process of* Building a Claim, *please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?

There were fears among staff in both categories that the overall process of claims building may continue to be a barrier despite all of the information they would have available to them. For four staff, it was the sheer volume of new 'things to be learnt' just to decide whether to start a claim that may always be off-putting.

For others, it was the fact that students would have to learn about a process other than just learning on the course which may also affect whether or not they see APEL as an opportunity or not.

It was this view of information overload, as one tutor put it, that may deter staff from recommending APEL and students from actually taking it up. The need to attain the right balance between keeping the process as simple as possible without 'over simplifying' will be critical for the future success of the system and

for technology to be considered as reducing the barriers not simply adding new ones.

Three of the staff were also concerned about the 'outcome by outcome' approach to claims within the online process. Within the paper-based system, they generally worked at a module by module level. So, whilst there may be four or five learning outcomes per module, they generally only assessed a claim when the student felt they met all of the outcomes in a given module. Assessing in a more granular learning outcome level way, they felt, may cause more work and potential time delays in the overall process. These tutors requested that the system be adapted so that students could only submit their work for assessment once a whole module was complete.

Thinking of the barrier **Amount of Credit and Level of Credit that can be Claimed,** ***please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?***

All of the staff were concerned that the institutional rules on APEL need to be made a clear as possible via the new website so that students are fully aware of the amount of credit that may be claimed. A number of examples were given in which students had previously (in the paper-based system) been provided with poor or incorrect advice, leading to disappointment and dissatisfaction later on. These rules need to be made easily identifiable and accessible; otherwise, the students may not progress a claim. Whilst it did not pose a particular problem

within the current research, it was clear that this could cause problems in the online system, if not addressed.

Thinking of the barrier* Student Confidence, *please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?

This is a new potential barrier that was not identified in the Pilot Research. There was an emerging fear expressed by five of the staff that, despite better promotion through the website etc. students may not believe in their own experience enough to even contemplate that it may count towards academic credit and, as a result, they may not even begin the claims process. Similarly, these tutors were concerned that some students may feel that the institution may not value their experience enough to give them credit for it and therefore they may feel that they would be wasting their time.

These were legitimate concerns, which were not raised prior to the Main Research Study. I asked the staff concerned whether technology was seen as enabling students to overcome this potential new barrier category and how this may be achieved. The response was that these staff felt that it would help if the website could contain more examples from previous students who had successfully claimed APEL credit, where they discuss their early reservations and how these were overcome. This (they said) would greatly enhance the feeling of support too.

Thinking of the barrier* Self-Directed Claims*, please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?

As the student progresses through their APEL claim, one of the main tasks is to relate their specific evidence to the learning outcome for the module they wish to claim credit for, then compile a statement to describe how they feel the evidence meets the requirements of the learning outcome criteria. Within the paper-based system, students are issued with a list of the learning outcomes and, during subsequent meetings with their supporting tutor, they can gain an interpretation of the learning outcomes to help compile their APEL claim. Within the software application, the student sees the learning outcomes as part of the claims building process and can select these to 'view' on the screen prior to linking any evidence to them. What the student can see is a copy of the learning outcome description exactly as it appears in the paper-based Module Guide.

All but one of the staff explained that the interpretation of the learning outcomes can be quite a major issue for some students and can cause them problems even with regular face-to-face contact. One tutor described a situation where repeated 'explaining and re-explaining' to the student took 'four or five goes before it sunk in', and that was 'only one of the [learning] outcomes'. They went on to explain that this is because of the language used. Learning outcomes are part of the Module Guide and, as such, are written in an academic language that is not always easy for a student to interpret.

In transferring the learning outcome descriptors directly to the online application in their current format, tutors feared this may lead to further problems for some students because they may not fully understand the requirements of the learning outcomes, or they may misinterpret their requirements and, in doing so, submit evidence or statements which do not meet the criteria. This may cause possible dissatisfaction in the APEL process and have a detrimental effect on student experience. Other students may 'get stuck' on certain criteria and worry unnecessarily, leading to the possibility of more feelings of isolation.

The learning outcomes descriptions cannot be changed, as these form part of the agreed qualification. However, most staff felt that more support could be provided within the software application itself, in three basic ways. The first is to provide more clarity and explanation of the requirements of the learning outcomes, i.e. instead of just listing the criteria, further supporting information could be provided to explain the basis of the learning outcomes. The second was to provide examples of the types of evidence used in the past so as to stimulate the students' thought process towards their own claim. The final improvement could be the provision of a case study from a specific student who had claimed APEL based on the module's learning outcome.

I asked these tutors about the reservations expressed earlier concerning 'information overload' and the effect so much additional information may have on students. The tutors accepted that this could be a significant undertaking and that the 'right balance', as one tutor put it, needed to be struck but that 'anything

which could help overcome these issues' would 'surely be of benefit to the student'.

Conclusion

In this chapter I have presented the analysis of the data I collected from the semi-structured interviews with staff involved in the research. The seven staff were very frank and honest with their views concerning the extent to which the technology I have developed may or may not assist in overcoming barriers. Whilst the data are in no way generalisable given the sample size, the group do represent a good cross-section of staff from various academic areas and experience. In the next chapter, I present the findings from my data collection with the student focus group.

Chapter 7 Findings from the Data Collected from the Student Focus Group

Introduction

In this chapter, I present the findings from the data collected from the student focus group which took place after the students had used the website and software application to build their APEL claims.

The focus group was arranged for as soon as possible after the completion of the process of compiling the APEL claims. My idea in doing so was to try to ensure that the experience of completing the claim was as fresh in their minds as possible. All seven students who had compiled claims via the system took part as outlined in Chapter 5.

To try to ensure some level of parity between the feedback from the tutors and the feedback from the students, the focus group questions were designed to ask students their views about the same barriers identified by the earlier preliminary and pilot studies arranged in a similar semi-structured format and in the same order. That said I also used parts of the session with students to gain some valuable insight into how the system actually worked for them and was used by them, to help inform possible future enhancements I could make to the system for other students.

I also asked the same preliminary questions i.e. ‘What are the advantages of APEL, what most attracts you to APEL and what would prevent you using APEL?’ to ascertain the different perspectives of staff and students on the general concept of APEL, which may ultimately have some bearing on the research focus.

It would be important to know and understand whether any differences of opinion exist between the tutors and students in relation to their views on whether the online application could help to address the barriers previously identified. For example, just because the software application makes the process of APEL less bureaucratic for staff does necessarily mean it will be less so for students. These differences, if any, would be useful in determining how the application could be further developed as well as helping tutors to understand the students’ perspectives on these issues. As the focus group took place after most of the staff interviews, I was also able to ask students for their perspectives on the two new categories of barriers identified in Chapter 6 i.e. student confidence and self-directed claims.

I designed the session to take about an hour, but allowed extra time should it be required. The location was a medium-sized meeting room in which I also had access to a computer with internet access and a projector so that we could use the software application and website if this was needed. I decided against using a formal classroom in favour of the meeting room as this gave a less ‘teacher-pupil’ feeling, since we all sat around the same table for the discussion rather

than at desks with me at the front. Given the range and level of the feedback, this appeared to work well. In the same way as in Chapter 6, I present the findings for each question alongside its rationale. In this way, I hope to make the findings easier to follow.

Introductory Questions

Please tell me about your views of APEL and, in particular, what you see are the main advantages for both the student and the institution?

The benefits of APEL are widely documented in literature (see Chapter 2) but little of the previous research involved students describing their views on these benefits. Instead the literature almost entirely focuses on the views of the institution or academic staff. Gaining the students' perspectives on what they viewed were the advantages (and disadvantages) of APEL is extremely important for a number of reasons.

The first concerns the APEL concept as a means to have their experience or informal learning recognised against the qualification they are aiming to achieve. Students ought to be able to recognise some value, benefit or advantage to themselves prior to making a claim; otherwise, why would they consider doing so? This seems obvious but, as discussed in Chapters 1 and 2, awareness raising of the benefits of APEL is far from routine. Asking the question may also reveal something that has not previously been considered.

The second is that it may provide a greater level of understanding of which advantages are more important to students than others. In this way, it may also be possible to inform any future development of the website or software application.

The third relates to the website. If students are able to articulate what they see are the benefits, this may be an indication of the extent to which the new website was able to inform these views by providing information on these benefits or advantages.

The overwhelming response from all of the students was that they could see a range of advantages in the APEL offer, broadly similar to those of the staff. They all agreed that cost/money was a key motivational factor and that a significant advantage of APEL was the possibility of reducing the cost of their learning. Like many institutions, the college has raised its fees for Higher Education in recent years due to changes in government funding. The fee for a whole Foundation Degree (which is the most popular HE route) was £12,000 split over two years, with the student paying £6,000 per year. As described earlier, the APEL rules allowed for up to 50% of the course credit to be awarded through APEL (depending on the claim), so it was possible for some students to gain a 50% reduction in fees for each module they claim credit for. This could therefore result in the possibility of reducing the overall cost by £3,000.

The fee reduction available through APEL was described as a ‘huge incentive’ for students to ‘take APEL seriously’, as one student put it. Flexibility was the next most popular point in this discussion. Given the nature of APEL, the students most likely to have enough experience to make a claim will be adults with some degree of current or recent work practice to draw their experience from. As such, many of these students may also be currently employed whilst undertaking their course. The flexibility offered by APEL, i.e. the flexibility of building the claim but also not needing to attend college for the lessons of modules for which they are claiming, was also seen as a distinct advantage. Unlike in the case of the staff, although time was seen as an advantage, it was not considered as important as money and flexibility. Five students felt that the building of an APEL claim could still take a good deal of time, albeit less than actually attending all of the lessons for the module being claimed for.

The final advantage expressed was the fact that APEL ‘values learning through experience’ and the fact that this experience ‘counts for something’ should not be underestimated. Five of the students concurred that counting one’s own experience gave them a ‘feeling of worth’ in their work that they had not previously considered and that they ‘took for granted’ this knowledge as ‘just doing my job’.

The students were concerned, however, about the ‘major lack of awareness’ among their peers even of the existence of APEL. One student described it as the college’s ‘best kept secret’ and that this needed to be addressed. Their view

was that APEL should be as ‘visible’ as all of the other aspects of the course and that the opportunity should be ‘routinely’ discussed, especially with adults on part-time courses, the group possibly with the most to gain from such an offer.

What was the main reason that attracted or motivated you to make use of the process of APEL?

The purpose behind this question was (as with the staff) to ascertain whether there was a dominant reason why students would undertake an APEL claim. Cost was seen by all students as a huge advantage to determining whether to make a claim, but interestingly this could not be singled out as the main reason. In the era of increasing HE tuition fees, the students said they had become increasingly concerned at the affordability of Higher Education and that if they could offset some of the cost, this would be a huge advantage. Time was considered to be of equal benefit to all in the group. As they were all part-time students with full-time jobs, the flexibility and potential for reducing the length of the course carried a lot of favour among the group. It was interesting to note that the students saw this combination of advantages as equally attractive rather than any single factor and, surprisingly, that cost alone was not considered enough of an advantage without other advantages being available.

Please tell me about your views of APEL and, in particular, what you see are the main disadvantages for both the student and the institution?

In addition to the specific categories of barriers (addressed in the following subsections), the students also raised concerns about general awareness of APEL among students and the need for consistent information.

The students taking part in the study recognised the need for the robust application of academic standards for APEL to be considered equal to undertaking the course itself. That said, chief among their concerns were the needs both to provide consistency of information, advice and guidance about APEL and to 'get the message right'. One student put it as follows, 'if staff cannot explain it, how on earth can you expect students to do it?' At the heart of this was a concern that 'selling the concept and benefits' of APEL was vague at best with 'different messages' being given by different staff. Another student said that it was a 'lottery' between students on whether 'you got a tutor' who could explain it properly. All of the students concurred that they had all had a slightly different experience at the start of the claim.

Awareness was another issue raised by the students at this point. Although the students involved in the study were made aware of APEL once they had started the course and had several discussions with their tutor, there was a concern that this 'awareness raising' was too tutor focused and could lead to a lot of students with potential APEL claims 'missing out' because their tutor had not informed them of the options. This could be out of genuine error or, in the case of a

‘conspiracy theorist’ (the student’s words not mine), that tutors deliberately do not inform students of the possibilities of APEL either to keep the ‘numbers up’ on their course ‘to protect their jobs’ or to maximise income for the college. This conspiracy view was by no means the general view of those present (being the view of a single student), but it does represent a concern of a minority and points to a need, not only for consistency of message, as above, but also for a consistency that the message is given in the first place. Five of the students were more concerned about the latter of these two points and suggested there was a need for better awareness raising about APEL such as advertising the offer but with the provision of clear, succinct information along with good case studies and examples of former students or claims, describing the benefits and commitments required.

When asked whether the website should do this, the students replied that it should; however, this would be limited as it was not ‘currently advertised anywhere else’. More needed to be done with the college’s main website to promote the APEL offer which could then direct potential claimants to the APEL website for more information. Students also said that that staff needed to be ‘on message’, that they should not become reliant on the website to identify potential APEL claims and that they still ‘need to do more’ to ‘promote this’.

Another key issue that might prevent students from taking up APEL was the issue of the benefits. As explained earlier, students felt that these needed to be made clear but that they also needed to be at a level which is attractive, particularly

when concerning money. I asked whether the current financial discounts were pitched at the correct level. Most felt this was the case, but there was a concern that if this changed in future, it could seriously hamper the offer.

Views of the Students about the New Online APEL Process

In this section, I present the findings of the students' views about using the new website and software application for developing and submitting their APEL claims. For each of the categories of barriers, I asked the question in the same way as follows:

Thinking of* (category of barrier)*, please can you tell me the extent to which the new website and software application helped to overcome this and in what ways?

Follow up question

Would you recommend any improvements to either the website or the software application that would help further overcome this barrier if it still exists?

Thinking of the barriers* Bureaucracy, Time-Consuming, Lots of Paperwork, *please can you tell me the extent to which you feel the new website and software application helped to overcome these and in what ways?

In the same way as for the feedback from staff in the staff semi-structured interviews, I decided to address these questions together to keep some level of consistency between the way in which I questioned staff and students. The

students attending the focus group were new to the college and had not experienced the previous paper-based APEL system or the prototype software application developed for the preliminary and pilot studies.

As discussed in Chapters 3 and 4, I offered each student a training session to provide an overview of the software application and how to use the key features of the application in order to build their APEL claim. I remained available to assist with any technical or support questions throughout the claims building process but did not interfere with the process itself. This was because the important question was how or whether technology could overcome the perceived barriers and therefore I wanted the process of building a claim to be as natural and self-directed as possible.

During the training session, I also made available some examples of existing APEL claims made in the paper-based process to provide the students with a reference point on the current system. I felt this was important because, as new students, they had only seen the technology based process. If they were to make any assessment on improvements within the technology based system, they would, I reasoned, need at least some insight as to how their claim would otherwise be conducted. I also made the students aware that the actual process of building a claim was the same in both in the paper-based system and the technology solution and that the purpose of the research was to establish whether the technology solution was able to reduce or eliminate any of the barriers previously identified in the preliminary and pilot studies.

All of the students agreed that, irrespective of whether APEL was paper-based or supported with technology (they could not make the same sort of comparisons between the 'old' and the 'new' approaches as the staff could), APEL was, at its heart, a very simple concept made unnecessarily bureaucratic and time-consuming by either staff or the institution.

One student was quite vocal on this point suggesting that 'the process is just like building an NVQ portfolio; yet within HE it seems to be shrouded in mystery, dressed up to appear much more complicated than it actually is'. Having previously been involved with assessing NVQs, I could see the validity of the comparison the student was making. The performance criteria in NVQs play much the same role as the learning outcomes of a degree programme. That said, this was not a comparison between the two types of programme; similar barriers may possibly exist in these programmes, but they are beyond the scope of this study.

I was concerned, however, about the point made about making this more 'difficult' than it actually is and asked the student to clarify the point. The student explained that the comment was related to the process of building the claim rather than their assessment as they understood the need for rigorous assessment of the evidence. In the student's view, the college process for awarding credit was quite elaborate involving assessors, managers and finally the APEL Board which seemed to be overly bureaucratic and costly. This was a

fair point, but the overall governance and process of APEL within the college was beyond the scope of this research so I simply committed to feeding this comment back to the appropriate college authorities.

In terms of the technology developments, all of the students suggested that overall this (meaning a website and software application) was the right approach to supporting students to build their claims. One student said they 'could not imagine trying to put this together in some sort of paper portfolio'.

The students felt that the management of their claim was enhanced through the ability for them to be able to access a holistic view of their claim via their home screen. This allows them to quickly check the status of their claim and determine whether there are any actions to take or evidence returned or communications received. The students suggested that adding new functionality to the software application which alerts them, for example via email, to the existence of a new or updated status alert or a new communication, would significantly enhance it and reduce bureaucracy further.

The Claims Building Wizard used by the students was considered by them to be a very useful way in which to guide students through the process of building their claim and ensuring that they made appropriate links between their evidence and the learning outcomes for their module or qualification. That said, the students did suggest there was some confusion when using the Wizard about exactly when evidence has been submitted for assessment. The tutors also suggested

that the granular nature of the claims building process, i.e. at learning outcome level, was also leading some students to become confused that credit could be gained for individual learning outcomes rather than whole modules. As such, some students had submitted evidence for single learning outcomes. Students recommended two improvements which could overcome this difficulty. The first was to make the information clearer via the website. The second was to adapt the functionality of the software application to only 'allow' submission of evidence to the tutor for assessment once the student had uploaded evidence and created supporting statements for all of the learning outcomes within a module. As this second recommendation was a slight deviation from the current approved APEL process, this would need the approval of the HE Academic Board before it could be adopted as part of the process.

Whilst single items of evidence can be used to support more than one learning outcome, the students tended to agree that this could perhaps be quite cumbersome in a paper-based system. The ability to easily cross-reference evidence and use a step-by-step process both to build a claim and also assess it was considered a major advantage over the paper-based system.

Within the paper-based system, there was no formal mechanism in place for students to receive feedback on their evidence. Instead, face-to-face meetings were arranged between students and their tutors, to discuss claims as well as to receive any feedback verbally. This would then require the student to take notes and rely on these when making any adjustments to their claim and was seen as

an overly cumbersome way of ‘doing business’. The students said that the software application had had a significant impact on the need for physical meetings by allowing much of the feedback on evidence to be provided within the software application itself. This not only ensured that there was a permanent record of the feedback but also reduced the need for as many face-to-face meetings.

The fact that the software solution also ‘tracks’ evidence means that tutor performance can also be measured in a way which was not possible within the paper-based system. On submitting evidence, not only can the tutor view this to assess it but their manager can ‘observe’ this to ensure that the evidence is assessed in a timely manner. All the students agreed that some form of contract on service performance (for example a Service Level Agreement) will be needed in future to assure the process and that some modification to the software application will be required to alert managers to evidence which has not been assessed timeously.

The students agreed that this process could be further enhanced by recommending that the software be adapted to include further functionality so that all communication between student and tutor could be handled within the software, rather than just the assessment feedback. They also suggested that other technology (such as video conferencing) could also be introduced to further reduce the need for physical meetings. Such technology, in their view, ‘was now commonplace with tools like Skype and so on’ being available.

On the issue of time, a number of benefits were suggested. As the technology based claims process reduced the need for face-to-face meetings (which often take time to arrange), both students and staff agreed that the overall time taken to conduct a claim should be reduced quite considerably through the use of the software application. The ability to progress the claim through the software application also granted the students the flexibility to conduct the claim in 'their time' and submit their evidence for assessment, whenever they felt ready to do so.

Although the students could not really comment on the amount of paperwork in the paper-based system, they could see that this may be quite considerable. Both they and the staff discussed the significant advantages of the system in reducing the overall burden of paperwork and therefore cost.

Thinking of the* APEL information website, *please can you tell me the extent to which you feel the new website and software application helped inform you about APEL and in what ways?

All of the students said they liked the idea of a website which could be used as a support resource to help them prior to and during their claim. Although the range of information on the website was still quite limited, the general view was that this could be extremely valuable, especially as many students may be conducting their claims outside of usual working hours when tutor support may not be

available. The students said they liked the general look and feel of the application and it appeared well designed and easy to use.

All of the students expressed concern that, although the technology has many perceived benefits, there was a fear that the college's intention was to further develop the website and software application to make them more autonomous, thereby reducing tutor support by further enabling claims to be self-directed in future. They all expressed the fear that such a development needed to be carefully thought through and managed. Although they could see how students could be more self-directed in the future using such technology, there was a danger of 'too much reliance' on it leading to possible dissatisfaction and feelings of isolation among students. Four of the students feared that some tutors may also refer students to the website 'too readily' for support rather than providing this themselves.

The students all agreed that the role of the tutor should be 'highly visible' to the student, that a 'healthy mix' of tutor and website support should be available and that there should be 'no rush' to head towards a totally self-directed solution. They also agreed, however, that this approach should be flexible enough to cater both for those who wanted to work independently and those who wanted more support.

There was a pragmatic view among the students that 'some learning needed to be done' about the process of APEL prior to starting a claim and that the website

was an ideal way of providing this. In this way, all students would receive the same information so a consistent student experience would be promoted. One student called this the 'trade-off between reducing the overall time and cost of the course' and 'doing the whole module or course'. All agreed that learning about APEL and the processes should be as much the students' responsibility as the staff's.

They suggested that, although the initial amount of information may seem daunting, the website was seen as an advantage as it could continue to be referred to. Some feared that students using a paper-based system with infrequent access to tutors may feel more isolated because such resources as those on the website were not routinely available. I asked how the student knew this as a new student to the college. They replied that their tutor had informed them. None of the other students had received this information from their own tutor.

Thinking of the process of* Building a Claim*, please can you tell me the extent to which you feel the new website and software application helped to build the claim and in what ways?

As described in the previous section, the software application was designed to follow the existing APEL process but at the same time to try to remove some of the barriers such as bureaucracy. One way I hoped to achieve this for the student was to develop a tool within the software (which I called the 'Claim Building Wizard') with the aim of simplifying the process and therefore making the

claim quicker and easier to build (and hopefully cutting out some of the bureaucracy).

The Claim Building Wizard (see Appendix 7) was designed as a three-step process through which the student would:

- identify learning outcomes they wished to link evidence to (Step 1)
- upload evidence to the system (Step 2)
- write the supporting statements to support the claim (Step 3).

The aim was that the student would continue this process until they felt they had met all of the requirements of the learning outcome or the module, at which point they could then submit the evidence to the tutor for assessment. Submitting the evidence was achieved via a separate button on the student's claim overview screen i.e. not part of the Claim Building Wizard.

Feedback from students was that, although they generally liked the idea of the Wizard, they felt that this may cause some confusion. The separate processes of 'building the claim' through the Wizard and then submitting it later confused several of the students into thinking that, on completion of the Wizard, their evidence was with their tutor for assessment, as they had forgotten that these were separate processes (despite this being explained in the training session). This, they said, would possibly lead to further confusion and dissatisfaction when larger numbers of students were involved. One student said that, having completed the Wizard, he waited for a week for the tutor to 'get back' to him.

Only on contacting the tutor did he become aware that he had not actually submitted the evidence for assessment.

I explained that the purpose of the Wizard was to allow the students to iteratively select learning outcomes to build (and edit) their claims prior to submission, rather than the claims being sent automatically upon completion of the Wizard. The main reason for this was to effect a conscious decision by the student to submit their work for assessment. In doing so, their tutor would then know that it was to be assessed. The disadvantage of auto-sending the evidence is that the student may then decide to edit the submission, but at the same time the tutor may be working on the earlier version. This could therefore introduce other confusion into the process.

Once explained, the students agreed they could see the logic in this but that this information needed to be made much clearer to the student to avoid any future confusion. I explained that this is part of the research process and that it was good to receive such valuable feedback as this about how the system works in practice even when previously tested.

Thinking on my feet slightly, I suggested that some of what they were looking for could be achieved in the following way. At the end of the third step in the Wizard, when the student ‘saves’ their work then repeats or exits the Wizard, I could introduce a new feature button to ‘save and submit to tutor’. In this way, students who wished to submit their work could, and those who wished to do more work

could do so too. The students were happy with this as a ‘simple, yet effective’ solution, which would be of significant benefit to them.

The student home screen was also discussed and the students favoured this approach as it provided them with a ‘simple overview of their current claim status’, as one student put it, as well as indicators on any actions that might need to be taken. For example, when evidence is returned by the tutor, an indicator appears on the screen notifying the student of this. That said, four of the students suggested this could be further enhanced by sending an appropriate notification to the student when such alerts appear within the software application. Otherwise, they suggested, students will have to either keep logging in to the software application to check on any updated status or communications, or rely on their tutor to inform them. I asked whether this was simply shifting responsibility of managing their claim elsewhere. There was a clear response from all of the students that such a feature would significantly enhance the software and, in the view of at least four of them, this is now ‘commonplace’ in software applications.

Although the students could not make direct comparisons between the time taken to build a claim through the paper-based system and the technology solution, most (5) seemed to agree that the former process would be more time-consuming. With the above caveats on tutor support aside, the students said that a number of time advantages existed.

The first of these relates to the possible time needed to discuss aspects of their claim with their tutor. Within the technology solution, the students could see distinct advantages in time when using this approach. As most of the communication about the assessment occurred within the software application itself, this resulted in possibly fewer meetings than they would have needed compared with the paper-based system. Again, the students were concerned to ensure that physical access to the tutor would continue to be available, but agreed that the technology provided a need for fewer meetings. As all of the students concerned were employed on a full-time basis, fewer meetings was regarded as a distinct advantage.

Related to this, the students could also see that arranging physical meetings could prove problematic for employed students owing to time commitments on both sides. One student said that it took more than a fortnight 'just to arrange my meeting'. I enquired as to how this might be overcome and gave an example of how video conferencing software was regularly used for meetings. The general feedback was that this could form part of the future solution, if this was 'the direction the college was heading in', but for students the main issues were those of communications and responsivity of tutors.

Communications were at the heart of making the system work and therefore for the technology system to be fully effective, all communications options needed to be considered. One simple but major step forward on this could be achieved (they agreed) via a messaging system within the software application itself.

Although communications about the assessments are managed within the software, other communications are handled via more traditional means e.g. email. If the software could be adapted to allow general communications too, this could mean that all communications were in the same place rather than 'scattered' over several types of media.

Another key issue was the perceived responsiveness (or in some cases lack of it) of the tutors. The students felt that some sort of 'contract' of expectations on both sides needed to be drawn up. This would set standards on response times for assessment, for example. I explained that the system already had warning indicators for tutors and their line managers to indicate evidence outstanding for assessment, but agreed this could be 'formalised' into a Service Level Agreement, which could also be published. I agreed to take this to the institution for consideration.

The final issue on the time-consuming nature of APEL was that students could see an advantage of using the technology in terms of not needing to print and reprint their claim and evidence. They could see how this might take quite a lot of time within a paper-based system, so the software application was seen as providing a clear advantage in this regard. On a similar note, the students also recognised that the software application offered a potential cost saving in terms of paper and ink, compared with the potentially frequent printing and reprinting requirements of presenting paper-based evidence.

To what extent do you feel the new website and software application helped clarify the process of building a claim and in what ways?

All of the students agreed that the principle behind the website for providing information, advice and guidance about APEL and the processes governing it was sound and had clear potential advantages over a paper-based system for providing such resources, even though at this stage of development the information was quite limited. One student commented that 'having somewhere to go to and remind you of the process' was seen as a clear advantage to 'having to keep asking the tutor for stuff'. In this case, the website was used to publicise the APEL process, as well as details about the award of credit and the ways in which this happened. Five students suggested that further clarification of the overall APEL process would be advantageous and, in line with the views of the tutors, a balance between 'selling the APEL opportunity' and making it clear that APEL is a significant undertaking, 'not an easy option', would be beneficial. Their concern seemed to be split between wanting to keep the overall message simple and clear to understand so as not to 'put people off' but not to 'lure them into a false sense of security' either.

Some of the students also raised a similar concern to that raised by staff about the way in which APEL is awarded by the APEL Board and not the tutor. These students felt that it was not entirely clear that there was another part of the process 'after the tutor' which takes place to formally approve the claim for credit (or indeed to reject it).

Whilst both of these issues could be made clearer through the provision of relevant information via the website, most of the students agreed that their tutor should also be playing a key role in explaining the processes. Their fear, as described in the previous subsection, was that there could be a slippage towards over-reliance on the information on the website rather than from their tutor and that a 'healthy balance' was needed to ensure that students using the technology solution in future are not disadvantaged in any way.

Alongside concerns to ensure the overall process is clear, four of the students also expressed concerns over lack of information on how long the process would take to complete once a claim had been submitted. This extended to a discussion on the need for students to be made more aware of the possible timescales undertaking such a claim would take. All of the students agreed that they had not appreciated, nor was it explained to them, that the claim may take many weeks or even a few months to build. This would, they said, significantly undermine the college's attempts to enable more students to undertake APEL as this aspect of the process was not entirely clear.

Students were also concerned to ensure consistency of information between staff and the website. A small number of the students explained that some of the information they were provided with by the tutor was different to that provided on the website. In two cases this related to the amount of money which would be discounted by gaining credit, which was obviously of some concern.

The overall view from the students towards the website and software application was positive, with the majority believing that this technological approach may help students understand the process better than a paper-based system, because the website would act as a constant source of information when the tutor was not available.

Thinking of the barrier **Amount of Credit and Level of Credit that can be Claimed,** ***please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?***

The general feedback on this section was that the information on the website sufficiently explained both the amount of credit and the level of credit that could be awarded as well as the possible fees discounts that could apply. Whilst the students felt this area was generally well explained on the website, there was again concern expressed to ensure consistency between staff and the website so as not to confuse or mislead students. They also expressed the view that the website would benefit from a few more 'case studies' as examples of how other students have achieved their claims.

Thinking of the barrier **Student Confidence,** ***please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?***

The students raised concerns that, at any point of their claim, their confidence could be affected and not just at the start of the claim. Four of them admitted to

having initial doubts about the amount or level of their experience and whether this would count towards the qualification, despite encouragement from their tutor. They felt the website was a good approach in helping to explain the concept and process of APEL and was definitely ‘a step in the right direction’. They suggested that more emphasis on case studies of previous students in a variety of subject areas, where they discuss their early reservations, would further enhance the support on offer and help with potential lack of confidence. Again, this should not be at the cost of or instead of support available from the tutor but complementary to it.

Other students were concerned that, having submitted a claim for assessment, this may be rejected and lead to feelings that their experience was being undervalued by the institution. They suggested that, whilst the software application contained some good tools for communicating feedback on evidence and claims, there was a need to ensure that tutors made the feedback full and clear, positive and empathetic, not just ‘matter of fact’. A couple of the students said that some of the feedback they had received was ‘very poor’ and did not provide enough explanation as to why the evidence did (or did not) meet the required criteria.

Thinking of the barrier* Self-Directed Claims, *please can you tell me the extent to which you feel the new website and software application helped to overcome this and in what ways?

All of the students were made aware that, in creating the technology solution for this research, I was attempting to address my key research question of whether technology could help to overcome the perceived barriers identified in my Preliminary Research and pilot research. In creating this solution, I was also aware that it increased the possibility of a more self-directed approach to claiming APEL, which placed more emphasis on the student to pursue their claim by using the tools and resources created for this purpose.

As the student progresses with their claim, one of their main tasks is to relate their experiential evidence to the learning outcomes for the module they wish to claim credit for. All of the students agreed that interpreting the learning outcomes was a major issue as 'other than the text stating the learning outcome itself, there was no other information to help explain what it meant or how to approach it'. I advised that the text of the learning outcome itself cannot be changed due to the Academic Regulations of the institution. The students all expressed some concern about this and there followed a discussion about how this could be overcome. This concluded with a suggestion that the software application could be adapted to have some additional text or an 'online help button' created, so that an explanation of the key requirements of the learning outcome could be displayed on the screen. The students also felt this could be further enhanced if

there was a specific example from a previous student for each learning outcome, although they recognised the volume of work this may cause.

The next concern raised was that of support. The students were concerned to ensure that they could be confident both in the availability of tutor support and in the quality of that support. Some students felt that they had a 'good tutor' who was very responsive and 'got back to me very quickly', whereas others felt they did not. They agreed with the principle of a published Service Level Agreement or set of published Guideline Expectations i.e. what the student can expect from the staff and what the staff expect from the student. Without this, the responsivity of staff could be called into question and leave the student feeling either confused or isolated, leading to dissatisfaction and possible student withdrawal.

Related to this, the students were keen to ensure that staff had the right technical skills and experience of APEL to ensure the technology solution had 'any chance of success'. Some students expressed the view that, in some cases, it appeared as though their tutor was not experienced in conducting APEL claims as the advice they had received was vague and ambiguous. Others suggested their tutor appeared to lack confidence in using technology and one tutor had actually admitted this to one of the students.

Finally, the students suggested that most of these issues concerning self-directed claims could easily be overcome by providing additional information either through the website or the software application, but that tutors must also be

consistent with this information and be fully trained and competent to implement the processes described within it.

Chapter 8 Discussion and Key Findings

Introduction

In this chapter, I compare and contrast the findings of the student focus group and staff interviews of the Main Research Study, detailed in the previous two chapters, in order to identify patterns, trends and recommendations which may be inferred from these data.

My research was a qualitative study conducted within the interpretivist paradigm. It was very much about understanding the views of staff and student participants engaged within the APEL process, in particular, on the extent to which the introduction of the website and software application was able to address barriers identified through earlier phases of my research in the preliminary and pilot studies. I was not seeking to generalise the findings identified to any larger population, although I am confident that, through the selection process, the participants did present a good cross-section of those likely to want to make APEL claims. Instead, my aim is to produce thick descriptions (Geertz, 1993) of what is going on based on these views.

Introductory Questions

The Advantages and Benefits of APEL

It is clear from the findings presented in the previous two chapters that there is a good level of correlation between the views of the staff and students concerning the advantages of APEL. These data also correlate well with previous studies,

which describe the benefits of APEL as widening participation (also referred to as social inclusion) (Johnson, 2002, Dismore et al. 2011, Scott, 2010) as well as flexibility and cost (Merrifield et al. 2000, Garnett et al. 2004, Scott, 2005).

The students' views can be described as being entirely focused on the advantages they could gain as individuals from APEL, such as cost reduction and flexibility, when compared to studying a whole module. They were not concerned about any wider advantages for the institution, unlike their tutors who expressed advantages for both the student and institution.

As the question posed was an open question (Bernard, 1995), the participants were encouraged to describe any advantages they could perceive, and I did not provide any prompts which may have led them to answer other than in a spontaneous way during the discussion. The contrast between the way in which the staff and the students answered the question is potentially linked to the prior knowledge and experience of the participant and the way in which information is presented to them (Atkinson et al. 2001). For example, the students in the Main Research Study had no previous experience of APEL and all of the information they received about it was gained either from their tutor or the newly created website. In the case of the website, all of the information on the website was designed to express positive messages about the benefits of APEL for the individual. Students were encouraged to visit the website in order to start their claim and obtain further information about APEL generally. As such, this may

have influenced the way in which they answered this question (Denzin and Lincoln, 2011).

The staff participants all had some prior knowledge and experience of APEL (to a greater or lesser degree) and as such, they had experienced APEL in some form prior to this research. This wider experience of APEL, and the fact they had experience of managing APEL claims, may have contributed to their generally broader view of the potential advantages APEL would bring to both the student and the institution (Denzin and Lincoln, 2011).

There was a broad similarity between the views expressed by the students and staff centring around four key themes of time, money, flexibility and value, although there was a difference in the order of their importance between students and staff. In relation to the themes of money and value, cost reduction was seen as a major advantage by both students and staff. This correlates strongly with much of the rhetoric describing perceived student benefits (Dismore et al. 2011). Scott (2010), however, argues that there is little published information or research into the cost benefits afforded by APEL, even though they are widely discussed, and he hints at this as one possible barrier to wider uptake. In this study, the clarity of information on the website describing the reality of potential cost savings, e.g. up to 50% of first-year costs, had significant appeal and was described by most students as having the potential to be a key motivational factor for students in deciding between similar courses in competing institutions.

Similarly, time was expressed by staff and students as a major advantage. As in Garnett et al. (2004), both groups picked up on the potential for reducing the overall amount of time a student may need to complete a course. Flexibility was also seen to be a major advantage of APEL, with both the students and the staff citing the fact that students would conduct the claim 'in their own time' and not have to attend college, as a major advantage. This type of flexibility is not discussed in the wider literature. Finally, the fact that students gain credit 'for what they already know' by 'valuing their experience' was also seen as a distinct advantage because they would not have to 'tread water' only to learn 'what they already know' (Scott, 2010).

Main Motivations towards APEL

The students felt that cost and time were of equal importance. The opportunities presented through a possible reduction in course fees, together with the potential time savings, were viewed as equally important. The fact that these were part-time students with full-time jobs was a significant influence on why time was considered to be so important by them. Recent increases in tuition fees announced by the government and reported widely in the media at that time led to an increasing concern among those in the group about the cost of higher education and therefore a perception of the increased importance of keeping these costs under control. A slight majority (4 out of 7) of staff said that students would see the time as the main advantage, while the other three suggested cost would be the main reason students would be attracted to APEL.

Staff views, therefore, were fairly evenly split between what they see as the main reason students would be attracted to APEL. There was a definite strength of opinion that time was a hugely important issue. The number of ways staff could describe time benefits, as discussed in Chapter 6, heavily outweighed the number of ways in which they could describe the cost advantages, leading one to assume that staff felt time was a more important reason than cost. However, it is also true that there are more limited ways in which to describe a cost reduction, whereas there are more ways to describe the time benefits.

There are possible hints at widening participation and social inclusion within the data when the students discuss the flexibilities of recognising what they already know. However, this did not really feature in practitioner (staff) or user (student) responses. Their focus was entirely on the more practical time and cost-related benefits.

The Disadvantages of APEL

There was an interesting contrast in the focus taken by staff and students to this question. Initially, they appeared to be following a very similar pattern in describing (as disadvantages) the categories of barriers I had previously identified in the preliminary and pilot studies.

The staff responses focused entirely on these. The data suggest that all of the staff considered that all of the categories of barriers I identified in the earlier phases of my research were still in existence and their views had not changed

between the Pilot Research and the start of the Main Research Study. The semi-structured interviews identified two additional categories of barriers concerning student confidence and self-directed APEL, as discussed in Chapter 6. The new categories of barriers identified by staff appear to arise out of a concern to ensure that the student can be successful once they have started the APEL claim. In their view, if technology was to become a key feature of future claims development, then a lot more information, support and resources were going to be required to support the student. This suggests that the staff consider that the main disadvantages of APEL continue to relate to the actual process of carrying out an APEL claim i.e. bureaucratic and time-consuming processes (Dismore et al. 2011).

The students were also concerned about these process-related disadvantages and much of their feedback correlated with that of the staff. However, there were some differences, of significance to the research, concerning major inconsistencies in the ways in which students were made aware of APEL and in the ways their claims were managed.

The students said that awareness was a significant disadvantage, in two ways. The first is the non-existence of a routine process for all staff to follow in making students aware of APEL in the first place. This was described as a conspiracy by one student. The second relates to the lack of any consistent information (and sometimes inaccurate information) from staff to inform them about the process and advantages to them in making an APEL claim. Johnson (2002) called for all

institutions to have clear and consistent methods for raising the profile of APEL and considered that it should become part of the formal recruitment policy. Given that raising the idea of APEL remains part of the tutor's role (Dismore et al. 2011), little seems to have changed to make this happen.

Views about the New Online APEL Process and Technology Solution

Responses from both staff and students to this question demonstrated significant overlaps between their views in terms of the extent to which the technology was able to overcome these barriers. There were also areas of contrast between the staff and students, and indeed within the staff grouping, and these are described below.

The Software Application

There was a high degree of agreement between students and staff views that it was the software application, albeit in its infancy, rather than the website that made the greatest contribution to overcoming barriers related to the process of building an actual APEL claim. The data suggest that the highly visual nature of the software application for managing processes was at the heart of this view.

For students, the design of the overview page, influenced by Fogg's (2009) behaviour model, helped them to better understand the concept of APEL. It also helped them to manage their claim, because of the direct visual links between the learning outcomes and individual items of evidence, and the creation of a

progress indicator to show the overall progress (completeness) of their claim. The step-by-step process within the claims wizard was a typical motivational gamification method (Viola, 2011) and provided them with a visual process which they could easily follow to guide the building of their claim, through the use of the progress indicator. These design features provided them with the motivation, ability and trigger (Fogg, 2009) which helped them to move their understanding of APEL from something which was initially a rather abstract and confusing concept and process into something more real and tangible. The students also expressed concern that this early confusion about the concept of APEL was not helped by staff, who made the concept appear far 'more difficult than it actually is'.

In the Haldane and Wallace (2010) software, no such direct links between the learning outcomes and evidence, and no visualisations, were developed. There was an overemphasis on awarding general APEL credit rather than credit related directly to learning outcomes and specific qualifications. As such, the concept was left rather more abstract, with the learner having to estimate or guess how much credit their experience was worth as well as having to guess, by interpreting level indicators, the academic level they could claim.

Responses from the staff I identified as early adopters (as defined by Bates, 2007) indicated a greater degree of willingness (than the cautious adopters) to engage in using the software application to assess the benefits in relation to these barriers. The data suggest a favourable attitude towards the capacity of the software to overcome the barriers. This was balanced with a number of

recommendations for how the system could be further developed to improve upon this, for example, by the addition of gamification features such as a flag to indicate students with evidence awaiting assessment (Deterding et al. 2011b).

The views of the staff in the early adopter group extended to the range of practical benefits that the software application introduced. The first concerned the overall amount of paperwork. A single APEL claim covering a number of units ‘will run into several inches-worth’ of paper, referring to the depth of the pile of paperwork needed for a claim. Now that the ‘paperwork was handled by the system’, the staff could see an ‘immediate benefit’. The second concerns the cost and time to produce this paperwork. The cost of such paperwork and the time it takes to produce it, (and to reproduce it, if the claim needs to be re-assessed, which it often does), are seen as particularly wasteful, whereas the software application eliminates this. This benefit is further appreciated for APEL Boards. The costs of producing all of the paperwork for each member of the Board ‘has all but been eradicated’ by the software application. This is especially beneficial given that all but one of the full copies of this documentation would need to be destroyed following the Board. Finally, the need for future storage has also been removed, as all of the claims can be stored and retrieved via the software application, although the cost of ongoing data storage has not been assessed.

This contrasts with the responses received from the staff I identified as cautious adopters (Rogers, 2003). It would be unfair to categorise these responses as

negative, but there was a recognisable difference between these staff and their counterparts. For example, whereas early adopters tended to identify process or system improvements which could enhance the software, such as additional information on the staff home screen, cautious adopters tended to focus on exceptions or areas where the software was limiting, such as in non-electronic evidence which is usual among this group (Bates, 2007).

There is no evidence to suggest an unduly negative attitude among the cautious adopter group towards the concept of APEL, which may in some way have been creating some bias in their responses. Instead, it emerged that two of the three participants in this group had very little experience of APEL prior to the research. As a result of this, they lacked confidence in the process, even though they were quite well experienced HE tutors (Dismore et al. 2011). The four staff in the early adopter group were all more experienced in assessing APEL claims than the cautious adopters.

There was concern raised by students that there was a possibility of placing too much of the onus on them to self-manage (Merriam, 2001) their claim i.e. to interpret the learning outcome criteria themselves and determine themselves how sufficient their evidence was in meeting these criteria. This concern was heightened by the fact that the learning outcomes statements were written in a language to support the qualification's academic approval rather than in language more suited to student consumption. Whereas in the paper-based system, the tutor would act as the interpreter, the students felt that similar interpretation of the

learning outcomes was needed within the technology solution to help avoid potential problems.

Staff too were concerned about student interpretation of the learning outcomes. Many of them had described situations from their own experience where it had been difficult to help students to interpret them even in face-to-face discussions and they felt that, without the introduction of additional information to help students interpret the learning outcomes, the software application may compound this.

In summary, the data showed that staff and students on the whole agreed that the software application showed good signs that it was able to help to overcome these barriers. Gamification within the overall design (Deterding et al. 2011) in general helped to simplify the process for both staff and students, and the students were also able to conceptualise APEL more clearly once they had used the software.

The data revealed that staff with more experience (early adopters) had an increased level of confidence over their less experienced colleagues (cautious adopters) (Dismore et al. 2011) in adopting the software application. This was manifested in the former's willingness and ability to make recommendations, whereas the cautious adopters were more likely to describe the software's limitations as presenting further barriers to its adoption.

The Website

The core principle for the design of the site was to make the content as clear and concise as possible while ensuring that the information provided specifically addressed issues raised during the preliminary and pilot studies, concerning:

- the need for published information about APEL to raise awareness of the opportunity to existing and potential students
- the lack of consistency between tutors about the benefits of APEL
- the need for published information about the APEL process and how credit is awarded
- the lack of information to support students on how to actually build a claim and the amount they need to learn to do so.

The website was created as a microsite (Shultz et al. 2009) of the college's main website. The same hardware infrastructure was used to host the site and the college's content management system (White, 2005, Mauthe and Thomas, 2004) was used to create the actual content that staff and students would see. A Uniform Resource Locator (URL) was used to provide a unique web address that the respondents could use to easily find the site. Examples of the website pages are included in Appendix 6, which demonstrate the website structure and content in relation to addressing the above concerns.

The data show agreement among staff and students that the website had great potential for addressing concerns about awareness and information about APEL processes. They recognised that, although this was still a prototype website, it

was already a significant improvement on the paper-based APEL process which relied heavily on the individual knowledge, skills and experience of the tutor which can vary considerably (Dismore et al. 2011).

The students said there were inconsistencies between their tutors (in the current process) which resulted in unclear guidance and inconsistent awareness raising about APEL. In the students' view, these inconsistencies and limitations may negatively affect the overall uptake of APEL, as APEL was not routinely discussed with all students with the potential for a claim.

The development of the website created a single location where all the information about APEL could reside (Jobber and Ellis-Chadwick, 2013). This, however, was no guarantee that tutors would refer their students to it and, as such, additional work will be needed to promote the website as part of other institutional recruitment processes (Johnson, 2002).

The tutor-led word-of-mouth nature of describing the APEL process and its benefits was cited as a significant barrier to wider APEL adoption (Scott, 2010, Dismore et al. 2011). All staff could provide examples of students they knew who had abandoned the APEL process as their expectations were somewhat different to the reality of making a claim. Whilst APEL itself is not a difficult concept (Scott, 2010), the comprehension of it by students can depend greatly on the level of knowledge or expertise of the staff required to manage it.

It was evident from the data that both students and staff felt that providing clear and accessible published information about the process would be a major factor in developing a successful APEL claim. This, they said, could be one of the most crucial aspects of supporting students to make the decision about whether to start a claim or not and, until this changes, the likelihood of confusion about the overall APEL process would remain.

The use of visual aids (Smith et al. 2004) and images with messages (Lester, 2013) proved to be a key approach which contributed to the students' better conceptualisation of APEL and their better understanding of the processes they would need to follow in order to make a claim. The student journey infographic and frequently asked questions section were central to achieving this understanding and helped them both to conceptualise this initially alien process and to learn more about what APEL is and its potential for them.

Data from both students and staff suggest the website would be significantly enhanced with the addition of case studies. Unlike the form of testimonial usually deployed on a marketing website (Jobber and Ellis-Chadwick, 2013), the respondents agreed there was a need for more in-depth examples of how students achieved their APEL claims. The use of such examples would add significantly more clarity to the expectations required of them (Garvin, 2003).

Although they recognised that the current website was a prototype, both groups of respondents suggested that the website could become an invaluable part of

the service, providing initial information, advice and guidance ('clear up-front advice', as one student put it) as well as information about every stage of the APEL process.

Concerns were raised, however, by both groups about the extent to which the website might be expected to replace the tutor within the APEL process. Whilst recognising the potential for allowing students more autonomy, the self-directed nature of the process (Hiemstra, 1994) could lead to further problems and confusion later on if appropriate support were not in place. Rather than solving the barriers, this would simply move them to another point in the process. The increased use of technology to replace human roles has been evident in the workplace for many years (Meyer, 2015). Frey and Osborne (2013) predict that 47% of Americans are currently working in occupations at risk of being replaced by computers in the near future. Meyer (2015, p.307) suggests that the question is not about whether 'human expertise will be increasingly replaced by that enacted by machines'. Rather, the question is to what extent can 'sufficiently sophisticated machines allow us to replace each other, to supplant experts with non-experts who are armed with technology, to revolutionize the production of knowledge and creative expression?' (Meyer, 2015, p.307).

The argument concerning increased use of technology in education has been raging since the 1970s. Freid and Goldberg (1978), whilst not doubting some of the economic benefits or benefits in the form of the range of new learning

resource types, ultimately conclude that teachers will always play an important role in the classroom and that technology can never replace this.

One significant issue is the fear is that the economic case for technology could lead to reductions in staff numbers and ultimately a poor learning experience (Allen, 2008, p.112). He argues that 'faculty members who could be replaced with technology, should be replaced with technology'. Allen's argument is then qualified in that he states that, if all the teacher is doing is reading notes to the class in the form of a lecture, then the teacher should fear replacement by technology. Teachers have the opportunity to provide 'uniquely human' interactions that technology cannot duplicate and there are many examples of those who continue to 'inspire, challenge, support and motivate in ways that make technology look pale' (Allen, 2008, p.112).

These sentiments are reflected heavily in the data from both staff and students. The students were clear that the tutor needs to be a highly visible presence throughout their claim, as otherwise this could contribute to feelings of isolation among their peers. They saw a potential future danger that too much reliance may be placed on the website, which could then become regarded as some form of surrogate tutor acting as a catch-all for information and support and, in turn, diminish the role of the tutor. They were also clear that the technology solution could act as a barrier to confidence if tutors did not engage with the solution and provide good, regular and empathetic feedback. This would be especially important for providing feedback when the evidence did not fully meet the criteria

for the learning outcomes. They agreed that the success of the APEL claim depended as much on the tutor guiding them through the process as gaining support from the website or software application. They recommended the development of service standards to provide greater assurance of both the timing and quality of support that should be provided.

Staff concerns centred around two issues. The first was the potential for dumbing down (or de-professionalising) their role and replacing it with non-experts with only the website as a tool to support such staff. Unlike Meyer (2015), staff believed that the wealth of contextual knowledge and experience they have cannot be fully met by a website, but that websites can act as catalysts for existing and potential students to be aware of the opportunity and the expectations on both sides.

The second concerns both the positioning of the website and the staffing of early parts of the recruitment process. If the early phases of the APEL process were replaced purely by the website and recruitment teams, some students may believe APEL to be an easier option, if the language of the website was more about ‘marketing’ APEL rather than providing information and advice. Staff were concerned to ensure student expectations were effectively set and managed via the published information so as to ensure there was a balance between accurate descriptions of APEL and not discouraging potential applicants by overwhelming them with too much information.

Conclusion

In this chapter, I have compared and contrasted the responses of the students and staff to the questions asked in the semi-structured interviews and the student focus group with the available literature. I have demonstrated that, in many areas, there is a strong correlation of views between the staff and the students and agreement on the potential of both the website and software application to help overcome many of the barriers.

Data from the students and staff made it clear that, in the paper-based system, there was significant reliance on the tutor to manage the whole APEL process effectively and to be clear, consistent, accessible, responsive and reliable in both the management and assessment of the claim and as a key source of information about all other aspects of APEL. Both groups agreed that the website could play a significant role in supporting staff to provide information in this way.

There were several recommendations about how the student experience could be further enhanced through the provision of a range of additional information and resources. For example, publishing the formal APEL policy would add further clarity to the range of information about the APEL process. More information about the expectations and commitments of both students and staff, as well as some form of ‘contract’ or ‘service level agreement’ so there could be ‘no confusion on both sides’, would also be advantageous.

The provision of case studies and examples from previous students was considered by most students and staff as a means of ‘humanising’ what is still otherwise quite a laborious process. Many of the students agreed that this could also bring about more consistency between tutors on the level of service and quality of information provided.

It is clear that both the students and the staff agree that the website made a significant contribution to overcoming barriers concerning information about APEL and how to conduct a claim. There was, however, some contrast in the emphasis placed on the importance of this information. For staff, the emphasis was more concerned with the earlier phases of making a claim, particularly in terms of information, advice and guidance. For students, there was equal emphasis on all stages of the APEL journey. In their view, the website should act as a supporting resource rather than a primary resource and should not diminish the role of the tutor in any respect.

In the next chapter, I will set out my conclusions based on this discussion.

Chapter 9 Conclusions

Introduction

The focus of my research was to identity the existence and nature of the barriers to APEL and the effectiveness of technology to overcome barriers and to support the process of Recognition of Prior Learning (RPL) and, in particular, the Accreditation of Prior Experiential Learning (APEL). Although the concept of APEL is well known in the education sector, my initial survey of HE institutions, prior to the research, revealed there was little or no uniformity of process or system for APEL among them. There seemed to be as many approaches to APEL as there were organisations surveyed. Indeed, within my own institution, there were similar issues. Whilst there was an APEL policy, there was little evidence of students being systematically made aware of the opportunities afforded to them through the APEL process (Johnson, 2002, Dismore et al. 2011).

Much of the literature about APEL is concerned with either proving the benefits of APEL or demonstrating, through case studies, how to conduct claims of one form or another. Much of the literature is also focused on Health Education where there appears to be more of a 'tradition' of accepting work experience in lieu of academic qualifications. The concept of 'work based learning for academic credit' (Evans, 1993, p.175) is well known, as is the concept of Work-Based Learning (Boud and Solomon, 2001), which is described as having the power to bring universities and employers together to create new Learning Opportunities.

Other benefits include flexibility and the opportunity to reduce the overall course cost (Scott, 2010); however, there is little evidence to suggest this is actually happening in practice on any widespread level.

On considering the actual process of APEL within my own institution and the level of participation, I determined that barriers within the process and management of APEL may exist which were affecting the level of take-up. I was concerned that these issues and barriers could also have an impact on student satisfaction, retention and achievement.

'Technology is one solution to overcoming the increasing access to 'opportunity lost' and 'demand-driven' students' (Strachan et al. 2011, np) and my assertion was that, if I could develop the right technology solution, APEL could be attractive to existing and potential students.

I therefore developed my research to examine these key questions. If APEL is such a good thing, then:

1. Why is its adoption not greater?
2. Are there any barriers to APEL adoption?
3. How could technology help to overcome any potential barriers?

In doing so, my aim was to identify the barriers which may exist and assess the effectiveness of the technology solution I had developed to overcome these.

I conducted two smaller scale studies prior to the main research (the first two phases of my practical action research design) (Denscomb, 2010). The first was my Preliminary Research which helped me to identify the main categories of barriers for investigation in the Pilot Research and the Main Research Study. The Pilot Research was used to inform the design and development of the technology solution as well as further test the barriers identified earlier.

The main research study was informed by this earlier work and allowed me to test the technology solution with staff and students to gain their views and how well (or whether), the technology solution was able to overcome any of the barriers. The student and staff respondents who agreed to take part, conducted their actual APEL claims and assessments of claims within the technology solution.

I carried out the research using qualitative methods as a case study in the form of action research (Lewin, 1946) in my own workplace as a participant within it (Argyris and Schön,1989, Kemmis 1993). My aim in using action research was to study the practice of APEL in the institution to:

- identify any barriers to its use (Preliminary Research)
- develop and test a prototype website and software application (pilot research)
- observe staff and student use of the website and software application in conducting an APEL claim (main research).

This iterative approach allowed me to refine each stage of the research based on findings of the earlier stage(s). Students were invited to provide their feedback via a focus group and staff via face-to-face interviews. Each of these sessions followed a semi-structured question format and both groups were asked questions on the same barriers in order to facilitate a comparison of the views between staff and students.

In this concluding chapter, I outline my key findings and discuss the strengths and limitations of the research through an evaluation of the methodology used to carry out the research to establish how successful it has been in clarifying what happens in the APEL process and what is not working. Finally, I discuss the implications of the findings for the future practice of APEL, both in the institution where the research was carried out and more widely.

Key Findings

Justification for the Research

My review of the literature in Chapter 2 highlighted a definite gap in the body of research concerning barriers to APEL, pointing to a need for further investigation. There are no studies which directly investigate these issues and only small number which identify any barriers at all. This is, therefore, not conclusive especially as much of this research was quite old (Merrifield et al. 2000, Garnett et al. 2004 and later Dismore et al. 2011). The few technology applications reported in the literature review were not developed to overcome barriers *per se* but to test how such technology could be used in APEL practice, and the fact that

neither is currently in widespread use also points to a need for further investigation. My Preliminary Research provided further justification for my main research as it revealed significant gaps in the awareness and promotion of APEL, as well as a number of barriers.

What does the Research tell us?

In this section I present the research findings in relation to the two main research questions namely: Whether there are barriers to APEL and, if so, what they are and the extent to which the technology overcame these barriers.

The existence and identification of barriers to APEL

My review of the literature in Chapter 2 established a definite gap in the body of knowledge about the existence of barriers which may be affecting the more widespread take-up of APEL and the nature of these barriers in preventing such uptake. My first task, therefore, was to ascertain whether any barriers existed within my own institution and, if so, what these were. My Preliminary Research, which involved holding meetings with tutors and managers to discuss current issues relating to APEL, was my initial tool to determine the existence and nature of any barriers.

The analysis of the data from these two meetings revealed differences between the views of managers and those of tutors. Data from the managers showed a very favourable attitude towards APEL and the view that it should be promoted

widely, given that a large proportion of the student demographic was part-time students with some degree of work experience. The managers did not identify any barriers they were aware of which should be preventing the take-up of APEL. Data from the tutors' meeting revealed a similarly positive attitude towards APEL but these staff identified a number of barriers which they believed could be preventing the more widespread take-up of APEL.

From this initial list, I was then able to further refine and categorise the barriers into two main areas: those which are part of governance and the rules set by the awarding organisation, and those which are related to the process and administration of APEL (see Chapter 4).

Further iterations of my research in the Pilot Research and Main Research Study both confirmed the existence of these barriers and enabled me to identify further barriers concerning student confidence and the self-directed nature of the new technology based process.

I draw two conclusions from this. The first is that the weight of evidence demonstrates that there is definitely a significant number of barriers to the more widespread adoption of APEL and that they can be categorised as organisationally rule based or administration based.

The organisationally rule based barriers were beyond the scope of my research (for reasons discussed in Chapter 4), principally because they required the

organisation to make decisions such as on the maximum credit that can be claimed, so they could not be addressed by the technology based APEL process. The college has undertaken to review this information within its academic board.

The barriers within the administration category were concerned with the process of APEL and the awareness of APEL. These, therefore, fell fully within the scope of the research and were included within the main research study in order to determine how well technology could be used to overcome them.

The second conclusion is that there are clear differences between the views of managers and staff about the existence of these barriers within the organisation.

The extent to which technology overcame the barriers

In order to assess the extent to which technology could overcome the barriers, I developed a website and software application based on feedback from the preliminary and pilot studies. A prototype of each technology was developed for the Pilot Research and the results of this helped me to identify further developments for inclusion within the Main Research Study.

Each of these technology solutions was developed to address specific categories of barriers identified in the earlier phases of the research:

- The *website* was developed in order to address those barriers related to the availability and consistency of information on APEL, improving awareness, the

detailing of processes and instructions on how to carry out and build the claim.

- The *software application* was developed to address the remaining barriers concerning the bureaucracy of APEL, its time-consuming and costly nature, as well as the actual process of building a claim.

The website

My research found clear evidence of several advantages to be gained through using a central website which both staff and students could access. There was a very strong level of agreement among staff and students that a website was able to assist in overcoming the barriers I had uncovered concerning the need for consistent published information and guidance about APEL in general, as well as the assessment process and the processes involved in initiating and building a claim.

A number of recommendations for future improvements to the website were also received. Chief among these was a need to include case study examples of previous students and their claims so as to help new students with theirs. The need for case studies was expressed time and again, but two areas stood out from all of the other requests. The first was for case studies concerned with examples of why students had decided APEL was the right choice for them. The second concerned examples of how students had made decisions concerning evidence in the process of building their claim. Both students and staff made the recommendations for case studies and, as they had done so independently, the

data are triangulated, suggesting there is a strong likelihood that such examples would help to reduce these types of barriers further.

There was worry expressed by both students and staff (again independently) that the website should not be developed further if the intention was to replace staff in the APEL process. The fear was expressed that the better the system, the less reliance there might be on staff to support the process. Students, in particular, felt strongly that the website should be there are a resource in addition to staff who they would still need to support them.

There were also some minor differences in the emphasis of information and website features which could further benefit students. For example, student feedback focused on the process as a whole and how the website resources could be used throughout the process of building a claim, especially when not in the college. The staff feedback, however, focused more on the awareness and information giving features.

I conclude from this that website technology is a powerful tool for providing a range of resources in helping to overcome barriers concerning APEL. Providing one source of information covering all aspects of APEL has clear advantages as I have found through this research. Institutions should therefore consider the benefits of investing in providing consistent, reliable and available information and resources about APEL as far outweighing the mostly word-of-mouth

alternative which exists today and which depends so significantly on the varying individual knowledge, experience and availability of the institution's staff.

The software application

My research demonstrates there are some very clear advantages in using the software application I developed to overcome the barriers within the paper-based system of APEL, which I identified in my preliminary and pilot studies. There was a strong correlation between the views of staff and students about the functionality within the software which enabled them to come to these views. There was also some good correlation of views about possible future developments which further enhance the software and students' experiences. For example, within the category of bureaucracy, both students and staff felt that the incorporation of features which provided the ability to see the claim 'all in one place' and view the status of their whole claim as well as individual units had made a positive impact towards reducing some of the bureaucratic nature of APEL. For students, this allowed them to better conceptualise the process of APEL than with the more abstract paper-based process which relied heavily on individual tutor descriptions which, in the view of students, often made APEL appear to be more difficult as a concept than it actually is. This, in turn, further improved the consistency of approach which was highlighted as a key weakness of the paper-based system throughout the research.

Staff views about the extent to which the software application could overcome all of the identified barriers were split between two groups i.e. the early adopters and

the cautious adopters, as described in Chapter 6. Although there did not appear to be any lack of willingness to engage in the project, the cautious adopters were more likely to focus their responses on the limitations of the software application or the APEL claims which were more unusual. They also tended to focus on the small number of cases which could not be accommodated rather than the many which could. The early adopters, whilst recognising similar issues, adopted a more pragmatic approach in accepting the potential limitations which they believed were heavily offset by the advantages.

There was also disagreement between the two groups concerning the time saving possibilities of the software application. The cautious adopters were concerned to point out that the process of assessment could not be shorter as the same amount of reading and reflection would need to be done. The early adopters' responses were more focused on the whole process and the overall time benefits which could be gained.

I established that the level of experience of APEL among the staff had a direct effect on their attitudes both towards APEL in general and towards their propensity to positively adopt the software application. There was a distinct lack of experience and confidence among two of the three staff categorised as cautious adopters which emerged during the research, which had an impact on the responses they provided. This behaviour was not observable in the staff categorised as early adopters, who were more experienced and confident in the APEL process.

For the students, it was harder for them to describe how the technology solution helped to overcome the barriers because they had no previous experience and therefore no previous reference point of this type of academic process to draw on for their responses. Instead, their feedback largely focused on the advantages and the disadvantages of the software (and website) for conducting their APEL claim. Although the students had not experienced the previous paper-based system, some of them talked about how they could not envisage 'having to do that much paperwork' when seeing examples of previous APEL claims. They also focused on key features which they described as advantageous, making a number of recommendations.

Summary of Key Findings

My research was not to question the validity of APEL as an assessment process or means to accreditation. My literature review has confirmed the validity of experiential learning and its assessment. Instead my research investigated a gap in the literature concerning the reasons why, if APEL is such a good thing, then why is it not more widely used? I set out to determine whether any barriers existed to the more widespread take-up of APEL and whether technology could play a part in overcoming any of these.

My research confirmed definitive evidence of the existence of a number of barriers and I was able to categorise these as relating to either the institutional rules governing APEL or the administrative processes for building and managing

APEL claims. The latter of these categories became the focus of my research. The barriers within the administrative processes were categorised using thematic analysis of the data from which I was able to design and build a prototype website and software application. The website was developed to address barriers concerning awareness, information and instructions, whereas the software application was used to address barriers concerning bureaucracy, time and cost.

There is strong evidence to claim that both the website and software application were able to begin to help to overcome the barriers they were designed to overcome. The website, in particular, resonated with all respondents who described the significant benefits of this approach. There was some slightly more cautionary feedback from some of the staff respondents and, from this, I was able to identify a link between the level of experience and how this affects the way in which they may adopt a technology based solution. This also highlighted a need for training and awareness among all staff to ensure APEL can be successfully supported and managed irrespective of the technology solution. The data also show, however, that the technology solution is still a relatively new development and a number of recommendations were made on how this could be improved to further enhance its capabilities.

Finally, the data (particularly from the students) show that the tutor and the support they provide is still critical to the success of any APEL claim and the technology solution should not be seen as replacing this role, with a need for the

tutor to remain highly ‘visible’ and accessible throughout. Although the technology solution helps to create more flexibility for the student and a sense of self-directed learning, this should not be regarded as a way of distancing the student from the tutor.

Strengths and Limitations of the Research

In this section I evaluate the methodology and approach I have taken during my research and, in doing so, identify the main strengths and weaknesses.

Research Focus and Scope

The focus of my research was to determine the existence of barriers to APEL and the extent to which technology could be used in the APEL process to overcome these. My Preliminary Research identified two broad categories of barriers i.e. those concerned with the process (or administration) of APEL and those concerning the institutional rules. I therefore revised the scope of the investigation by eliminating any barriers which were not part of the process of APEL itself, such as institutional rules. This provided a clarity of focus which ensured that the barriers investigated were appropriate to the purpose of the research and which could be tested by the technology solution. The revised focus meant that two of the barriers I had identified which concerned institutional rules would not be investigated and, as a result, questions concerning these barriers remain unanswered.

Although previous research in this area is quite scant, I felt that too much emphasis had been placed on staff views of APEL and there was very little evidence of anyone seeking to understand the views of students. In order to truly test both aspects of the research (i.e. the existence of barriers and the propensity of technology to overcome these), I included both staff and students within the scope. I believe this was important and a significant leap from previous investigations (Merrifield et al. 2000, Dismore et al. 2011) which only sought staff views. I believed that it was also important to elicit the views of students who are, after all, a significant stakeholder in the process. This approach paid off and I found a rich seam of data from students about all aspects of the process in addition to those of the staff.

Theoretical Framework

The Engestrom (1987) model of Activity Theory was used to provide the theoretical framing for my research. I found this extended model more useful than earlier the versions such as, for example, Vygotsky (1978) as it considered the whole activity system to include the social and collective elements of the activity system alongside the subject, object and tools (Engestrom, 1987).

Using this extended model, I was then able to conceptualise APEL as an activity system and describe the specific relationships and sources of tension within and between its elements and how they relate to one another in terms of the barriers to APEL identified in the literature. I established that most tension lay between

elements of the system (Engestrom's 1987, tension source 2) and only a few within specific elements (tension source 1).

In Activity Theory tools mediate the relationship between the subject and the object in order to achieve the goal and these are influenced by the rules, community and division of labour. Without tools, learners are restricted to a procedural understanding of what to include or exclude from their portfolio or how to present their capabilities in the institutional format or language (Cooper et. al. 2017). In Engstrom's (1987) fourth principle, any attempt to innovate or change the Activity System, e.g. through the introduction of new tools, requires new descriptions of these relationships to determine whether they cause any new contradictions or tension within the system.

In my research I developed and introduced new mediation tools in the form a website and software application aimed at investigating their effect on reducing the barriers previously identified and assisting with the boundary crossing between the informal/experiential to the formal (Cooper et. al. 2017). From the student and staff feedback on their use of these new tools I was able to create new descriptions of these relationships and establish the effect the new tools had on the overall activity system.

The Engestrom model of Activity Theory provided a very useful theoretical framework through which to develop my research and to describe and theorise the barriers to APEL, how they relate to the specific elements of the activity

system (and to each other) in terms of APEL practice and student and staff perceptions of the introduction of the new technology based mediation tools. This could be further enhanced in future by extending the Activity Theory model to investigate individual stages of the APEL process e.g. awareness raising, portfolio building and assessment and treating them as activities, in their own right, which contribute the larger APEL Activity System. By identifying barriers within each stage of the APEL and using Activity Theory to describe these we could further extend our understanding of how these barriers are affecting the wider take up of APEL. Based on this new mediation tools could also be identified to help overcome them.

Research Methods

The semi-structured interviews with staff lent strength to the research as they were designed to allow staff to speak openly and freely about their views on APEL and the extent to which the technology solution may have overcome the barriers. The student focus group session was designed to ensure that all the students had the opportunity to contribute rather than allowing a small number of participants to dominate.

Research methods and data collection strategy

Collecting documentation about the APEL process at the college did not pose any problems, nor did accessing examples of existing paper-based APEL claims. As an insider and someone who works within the system, I was aware of most of the documentation and was able to gain access to it easily through the HE

department within the college and the policies held on the college intranet. From these, I was able to reaffirm my knowledge on current processes and assessment methodology, in particular the concept and process of linking experiential evidence to learning outcomes as a means of describing the knowledge elements students and staff need to be aware of and the place of this concept in the APEL process.

The data from the students were collected through a focus group session and again the actual process itself was not difficult. I did not have difficulty in identifying respondents who were willing to take part as they were at the point of making and APEL claim anyway. Recording the responses of the session proved to be invaluable because I did not need to worry too much about writing notes and could focus more on the actual questions to ensure all members of the group had the opportunity to fully participate. That said, transcribing their responses was a hugely time-consuming exercise as was deciphering some of their conversation when more than one of them were talking at once. As this group of students did not have any previous experience of APEL, the range of responses was perhaps more limited in terms of the benefits of using a technology solution rather than a paper-based system in overcoming the barriers previously identified. Although I had anticipated this to an extent by providing examples of previous claims made within the paper-based system, their responses were more limited due to their having no previous APEL experience for comparison.

In an ideal world, it would have been beneficial to build some student comparisons between the paper-based process and the technology solution. Therefore, an alternative consideration could have been to ask the current students to conduct their claim both in the current paper-based system and in the technology based solution, but I discounted this as asking too much of the student. Similarly, I had considered asking students who had made APEL claims in the past but I decided this would be hard, given the potential time gaps between their original claim and repeating it using technology. Apart from that, it would not be a true reflection of testing certain aspects of the process such as awareness, because their awareness would already be higher than with a new student.

The collection of data from staff was unproblematic in itself, in that all the staff I interviewed were keen to be involved. Nevertheless, I was aware that those who assisted in the research represented staff who are more advocative of APEL and who would like to see it succeed, so the picture given is only a partial one. Even my cautious adopters could be described as APEL advocates. However, with this in mind, it sets the findings from the tutor data in a context where any problematic points have to be considered as particularly significant, when one considers that the wider environment may be more hostile to the process than those involved in this study. The staff demonstrated that they have established concepts of the ideal APEL candidate and perceptions of their colleagues' and their own roles and approaches as teachers and assessors. This is manifested in the detail of their discourse as well as in the content of their observations.

The Research Journey and what I have Learned from it

As an education and technology professional, I have been fortunate to be able to carry out research into an area I am extremely interested in and use my skills to develop a potential technology solution. Building the technology solution helped me to further develop my understanding of the barriers to APEL but also to appreciate the need to involve those who might potentially use these technologies in both their design and testing.

I have always believed in the strength of mixed method research to provide the greatest possible chance of addressing research questions, especially for providing validity of the research claims and conclusions. In this way, I have never considered myself at either end of the polarity between two of the main paradigms governing much research, i.e. positivism and interpretivism, but somewhere between the two. Similarly, I have tended to regard research as flawed if it did not contain a 'healthy mix' of qualitative and quantitative data to help triangulate the findings into claims and conclusions with some degree of generalisability.

My research, however, has taught me the real power of the qualitative method in really understanding why people do and say what they do, in ways that the quantitative method cannot. I have learned that a high degree of generalisability is not the most important outcome for research as all research outcomes are valid if the research is conducted appropriately and with integrity. I have come to

share the Ercikan and Roth (2006) view that, rather than a dichotomy, the line between low and high inference should be regarded as a continuum along which all research could be placed, and that all research therefore adds to the overall body of knowledge as a result.

As a director within the college, I was concerned that staff may not be entirely honest with me, either by letting me hear what they thought I wanted to hear or using the research as some type of opportunity to criticise the college. I was pleasantly surprised by the openness and honesty of the staff participants and their responses, which allowed me to gain a greater insight into the ways in which the barriers to APEL affected them and which enabled me to build a technology solution more able to address these barriers as a result.

Further Questions and Implications for Future Research

Outcomes for the Technology

It is a clear outcome of this research that the chosen technology solution was able to contribute to the lowering of the barriers I have identified. The website which provided a single source of information, advice and guidance was seen as an essential tool for the future success of APEL, both in raising awareness and for ensuring consistency throughout the process. The software application demonstrated how some of the bureaucracy could be removed and how staff and students could benefit from the time and cost savings afforded through the solution.

During the course of the research, a number of recommendations were made by students and staff on how the technology system can be improved to help further address the barriers. Many of these, such as adding all of the communications within the software, have been adopted. This clearly points to the value of an ongoing role for the technology as part of the APEL process. A clear message from the research, however, is not to assume that the technology should eventually replace the role of the tutor in the APEL process. Whilst students really valued the technology solution and its role in reducing barriers, the role of the APEL facilitator is also crucial to a successful APEL claim.

Implications for Research

This research was a case study of introducing a technology solution to address certain barriers within a specific institution. The institution is typical of others within the education sector and, although it would be difficult to discuss the representativeness of the sample to a greater population, there is scope to be positive about the wider implications of the study.

Conclusion

Although the scale of the research was relatively small and the scope limited to the barriers identified in Chapter 4, it does signify optimism towards the possibility that technology may help to overcome many of these barriers and I would propose further research of a wider sample of institutions and programmes to determine its larger scale applicability.

Whilst it is clear from my research that the use of technology may assist in the reduction of administrative barriers to the wider take up of APEL, issues of Power and Authority continue to exist throughout the APEL system which continue to limit its wider take up. The range of issues I have found warrants significant additional investigation to determine their impact on APEL take up and what might be done to address these.

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Appendices

Appendix 1 - Search Criteria for literature review

The obvious starting point was to use the Keyword APEL, but also variations of this including 'Accreditation of Prior Learning', 'Accreditation of Prior Experiential Learning' and 'Experiential Learning' were also used in the initial search. APEL, produced many thousands of articles and was quickly discounted in favour of a more descriptive search.

Accreditation of Prior Learning yielded 14,502 results, whilst further refining this to Accreditation of Prior Experiential Learning yielded 2248 Results.

The Term Experiential Learning yielded over 80,000 results and was discounted.

Given the volume of possible research into this area I placed a further constraint on the search criteria looking for results published in the last 10 years. This did not limit the results very much indicating that a large proportion of this research has been carried out quire recently i.e. within the last 10 years. I therefore place a further constrain on the search to limit results to 'peer reviewed' only and this reduced all returns by approximately 30%

I decided to limit the search to the last 5 years to see the effect on results. For the term Accreditation of Prior Learning the results reduced from 10, 673 to 2,349, indicating that two thirds of the research in the last ten years, had actually been carried out more than five years go. For the term Accreditation of Prior Experiential Learning, the results reduced from 1,653 to 1,064, indicating that two thirds of the research into this area had been carried out in the last five years.

The findings above indicate a general increase in investigating Accreditation of Prior Experiential Learning along with a general decline in investigating Accreditation of Prior Learning over the same period.

This finding is particularly important given the general increase in popularity of work based education in the UK. If a clear link can be made to the value of recognising prior experiential learning, in relation to taught programmes, it could signal an increase in demand. That said, given my initial research into adoption of APEL by Higher Educations across the UK, which showed that the use of APEL was not consistently used or systematically adopted, that remains to be seen.

That said I was still faced with over 1000 articles that seemed to meet my criteria

I therefore applied two further criteria namely: Barriers to Accreditation of Prior Experiential Learning (266 results) and Using technology for Accreditation of Prior Experiential Learning (331 results).

A combination of these terms resulted in 71 results which began to feel more manageable however this also excluded many articles I'd previously found which I felt could add value to my own investigation.

Appendix 2

Research Questions for Focus group – Pilot Study

- Do any of the group actually know about APEL?
- Could anyone articulate what they think it is?
- If no one has heard of it – do they know what it might be?
- What might be the benefits of an APEL system? Prompt for time, cost, work based etc)
- What would prevent them in using APEL – What are the current barriers to the organisation in enabling APEL to become a widespread and systematic activity?
    - It is easier for staff and students to study the programme than it is to apply for APEL.
    - As a student can only achieve a 'Pass' grade for the APEL claim, this puts of students who feel they may be able to achieve higher grades
    - APEL is a confusing and difficult to use process
    - Students only find out about APEL after they start their programme and cannot
    - Staff do not systematically promote APEL due to fears it may impact on their job security
    - Only 50% of the programme can be recognised in this way
- What do potential customers (employers/employees) want and need from the APEL system (technology and processes) to make it attractive to engage in higher education?
- What technologies already exist (if any) to enable APEL to be managed electronically, how do these work and what are their limitations?
- What technology can be introduced to support APEL and be flexible enough to work across other programmes which may use APEL.

Pilot Research Questions for Interviewees (staff)

APEL is widely discussed as having significant benefits by increasing flexibility and reducing the time needed to complete a programme and the overall costs. What I want to understand therefore is that if APEL is such a good thing, then

1. Why is its adoption not greater?
2. Are there any barriers to APEL adoption?
3. How could technology help to overcome any potential barriers?

Questions for semi structured interview

- What are your personal views of APEL as a concept? Do you think there are any benefits to offering APEL? If so what are they? (Advantages)
  - Institutional
  - Leaner Based

- What do you think most attracts students/employers to the concept of APEL?

- What would prevent them in using APEL? (Disadvantages)

- What are the current barriers to you and the organisation in enabling APEL to become a widespread and systematic activity?
  - Institutional Rules
  - Bureaucracy

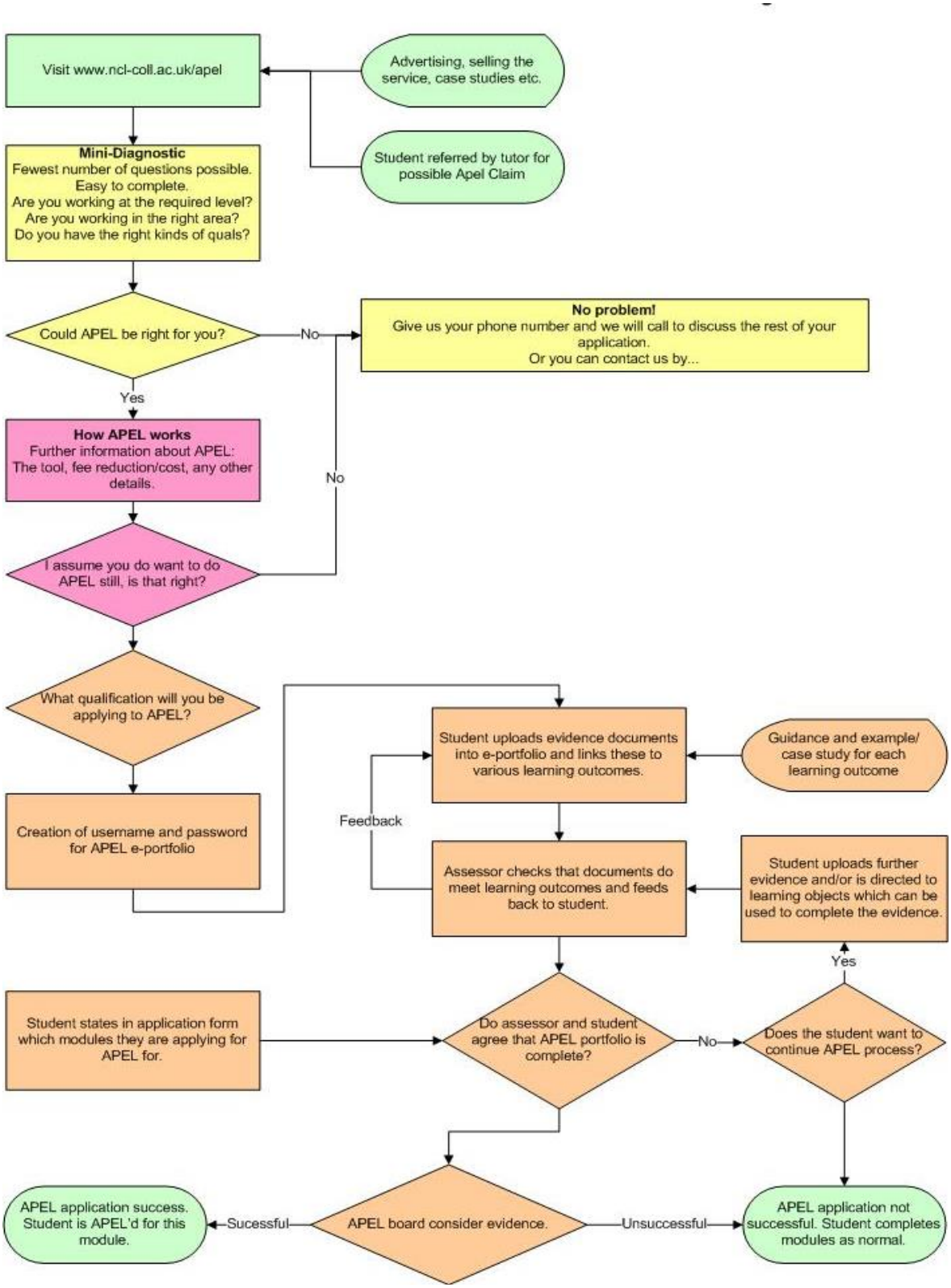
- What do potential customers (employers/employees) want and need from the APEL system (technology and processes) to make it attractive to engage in higher education?

- Are you aware of any existing technologies to enable APEL to be managed electronically? If so how do these work and what are their limitations?

- What features within technology could be introduced to support APEL and be flexible enough to work across other programmes which may use APEL.

- Assuming I design a system that broadly follows the existing paper based APEL process, do you have any requirements or suggestions on how this should work?

Appendix 3 – APEL Process Diagram



Appendix 4 – APEL Technology Functional Requirements

The following describes the high level system requirements of the e-Apel model

- Dedicated website/landing page for prospective Apel clients. Web page populated with key information, case studies and examples of Apel process and opportunities it provides.
- Mini-Diagnostic, carefully designed with appropriate questions to help prospective Apel Candidates assess whether there is a potential claim and how to go about it. Also offers those for whom Apel may not be appropriate a referral point to contact for more info
- Further detailed info for Apel candidates on remaining stages of process
- Prospective candidates will be required to register on the system and create an account. Access to system will be through a single secure connection externally (link from above landing page) and from within Blackboard (single sign on for existing Blackboard Users)
- The system will enable candidates both pre and post enrolment to capture evidence of their prior experience and learning. They will submit key evidence and link this to specific outcomes of the qualification they wish to Apel.
- Each qualification available for Apel will list key assessable Apel criteria at element level. The user will be able to look-up the evidence criteria for each element together with case study examples in order to assist their application.
- Candidates will determine which elements they feel their evidence may support. On uploading the evidence, the candidate is then required to specify exactly which elements they wish to link their evidence to.
- College staff will receive notification on evidence submissions and make an assessment of that prior learning and experience;
- Feedback mechanism built in to system allows assessors to feedback on the strength of submitted evidence
- Traffic light (or similar) system to enable easy progress tracking.
- Assessor Dashboard to view multiple candidates
- Multiple user levels for key roles i.e. User, Assessor, Admin, Apel Board

- Whole system design to be intuitive and easy to use and require little or no training to use (from a candidate perspective) and be fully accessible under W3C requirements;
- Multiple System reporting capabilities for Apel claim submission and usage statistics etc.
- Reductions in the time taken to make decisions about what existing experience and learning can be accredited;
- Complete usage tracking through backend database for quality assurance.

Appendix 5 – Invitation letters and emails to staff and students

Email sent to students in pilot research

Dear (Student)

My name is Sean McCready and I am Director of e-Learning at the college. I am conducting some research into the Accreditation of Prior Experiential Learning and I am looking for some volunteers to take part in the research.

The Accreditation of Prior Experiential Learning (APEL) is a process through which individuals can be awarded credit against certain qualifications if they have the right level of relevant experience.

My research is exploring the reasons why this is not taken up more widely within the college and whether technology might be able to help overcome any potential barriers affecting this.

I am writing to you as a student on one of the courses where APEL could be of benefit to students with some prior work experience in the same area.

I would be extremely grateful if you were able to participate in my research through which I will explore these reasons from the student perspective and begin to map out and test some of the types of technology which may help with this.

The research will comprise two main steps

- The first is a focus group session which will last for about an hour and will comprise up to 10 other students and will take place at the college. The purpose of this session is to help identify barriers which may be affecting the greater take up of APEL and to inform the technology requirements.
- The second is to use the prototype software application in a facilitated session lasting for one hour through which I can identify any potential problems.

Please could you reply to this email to let me know whether or not you are interested in participating. If you are able to participate, I will contact you again to agree a convenient date and time.

All note that all responses and contribution to the research will be treated in the utmost confidence.

Many thanks in advance
Sean McCready

Email sent to tutors in pilot research

Dear (tutor)

My name is Sean McCready and I am Director of e-Learning at the college. I am conducting some research into the Accreditation of Prior Experiential Learning and I am looking for some volunteers to take part in the research.

The Accreditation of Prior Experiential Learning (APEL) is a process through which individuals can be awarded credit against certain qualifications if they have the right level of relevant experience.

My research is exploring the reasons why this is not taken up more widely within the college and whether technology might be able to help overcome any potential barriers affecting this.

I am writing to you as a tutor on one of the courses where APEL could be of benefit to students with some prior work experience in the same area.

I would be extremely grateful if you were able to participate in my research through which I will explore these reasons from the tutor perspective and begin to map out and test some of the types of technology which may help with this.

The research will comprise two main steps

- The first is a short interview which will last for about an hour and will take place at the college. The purpose of this session is to help identify barriers which may be affecting the greater take up of APEL and to inform the technology requirements.
- The second is to use the prototype software application in a facilitated session lasting for one hour through which I can identify any potential problems.

Please could you reply to this email to let me know whether or not you are interested in participating. If you are able to participate, I will contact you again to agree a convenient date and time.

All note that all responses and contribution to the research will be treated in the utmost confidence.

Many thanks in advance
Sean McCready

Email sent to students in Main Research Study

Dear (Student)

My name is Sean McCready and I am Director of e-Learning at the college. I am conducting some research into the Accreditation of Prior Experiential Learning and I am looking for some volunteers to take part in the research.

The Accreditation of Prior Experiential Learning (APEL) is a process through which individuals can be awarded credit against certain qualifications if they have the right level of relevant experience.

My research is exploring the reasons why this is not taken up more widely within the college and whether technology might be able to help overcome any potential barriers affecting this. To this end, I have developed a prototype technology solution which I now need to test to examine how this works within actual APEL claims.

I am writing to you as a student who is considering making an APEL claim to ask whether you would be willing to take part in the research.

Your participation would be extremely helpful to the research as it would involve you using the new software to build your APEL claim and providing feedback to me on your experience of this.

If you are able to help I will provide full training and be available during the course of your claim to help with any difficulties should they arise.

Following this, you will then be invited to build your APEL claim and will be supported by your tutor to do this.

Finally, you will then be invited to attend a focus group session with up to 10 other students to feedback on your experiences and will last for about an hour.

Please could you reply to this email to let me know whether or not you are interested in participating. If you are able to participate, I will contact you again to agree a convenient date and time.

All note that all responses and contribution to the research will be treated in the utmost confidence.

Many thanks in advance
Sean McCready

Email sent to tutors in Main Research Study

Dear (tutor)

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I am writing to you as a tutor with students who are considering making APEL claims to ask whether you would be willing to take part in the research.

Your participation would be extremely helpful to the research as it would involve you using the new software to support your student build their APEL claim and providing feedback to me on your experience of this.

If you are able to help I will provide full training and be available during the course of the claim to help with any difficulties should they arise.

Following this, you will then be invited to support your student to build their APEL claim by using the software application.

Finally, you will then be invited to attend a short interview to feedback on your experiences and will last for about an hour.

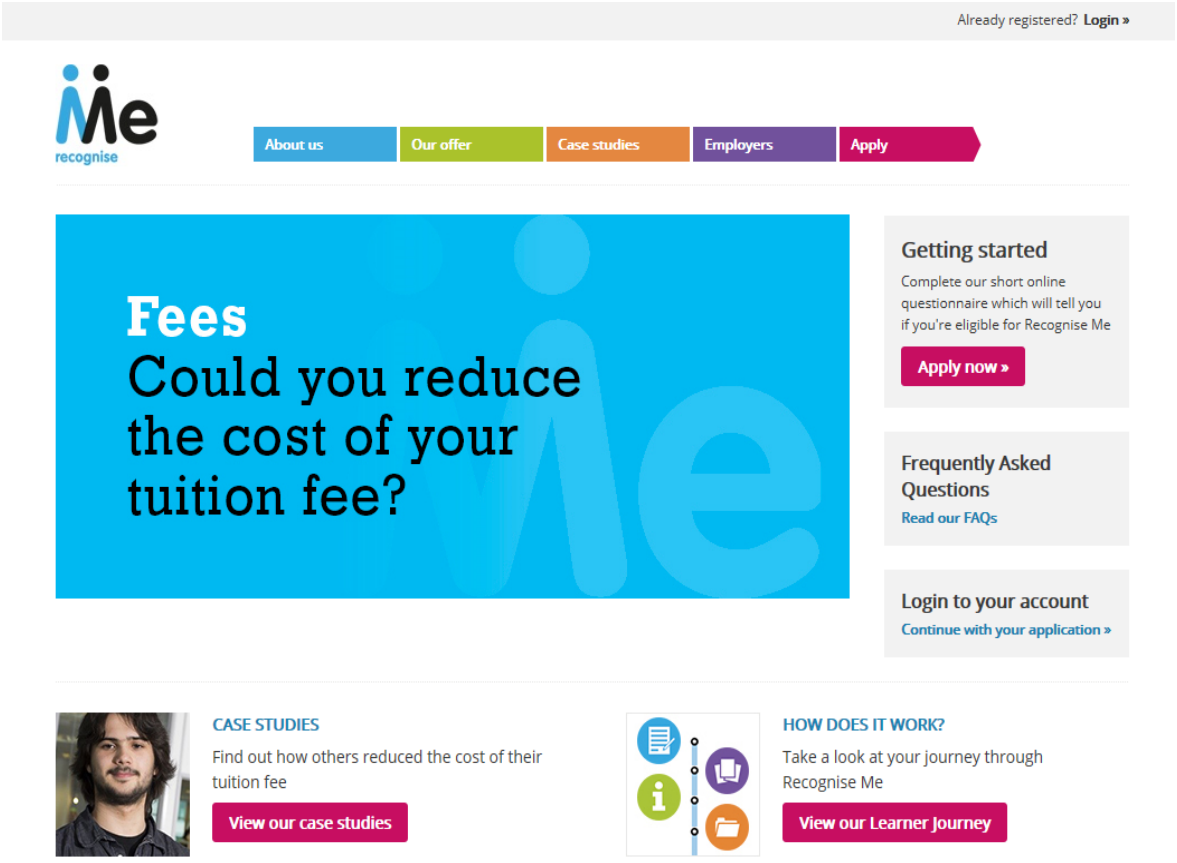
Please could you reply to this email to let me know whether or not you are interested in participating. If you are able to participate, I will contact you again to agree a convenient date and time.

All note that all responses and contribution to the research will be treated in the utmost confidence.

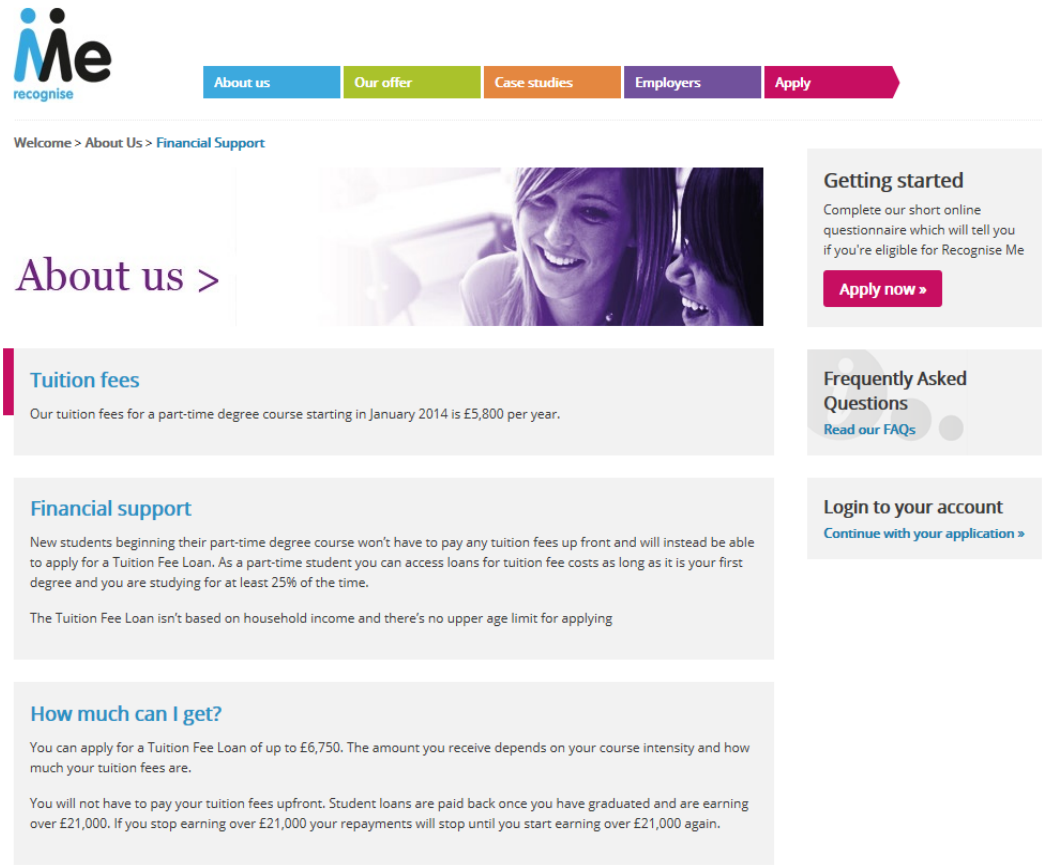
Many thanks in advance
Sean McCready

Appendix 6 – Example Website Screens

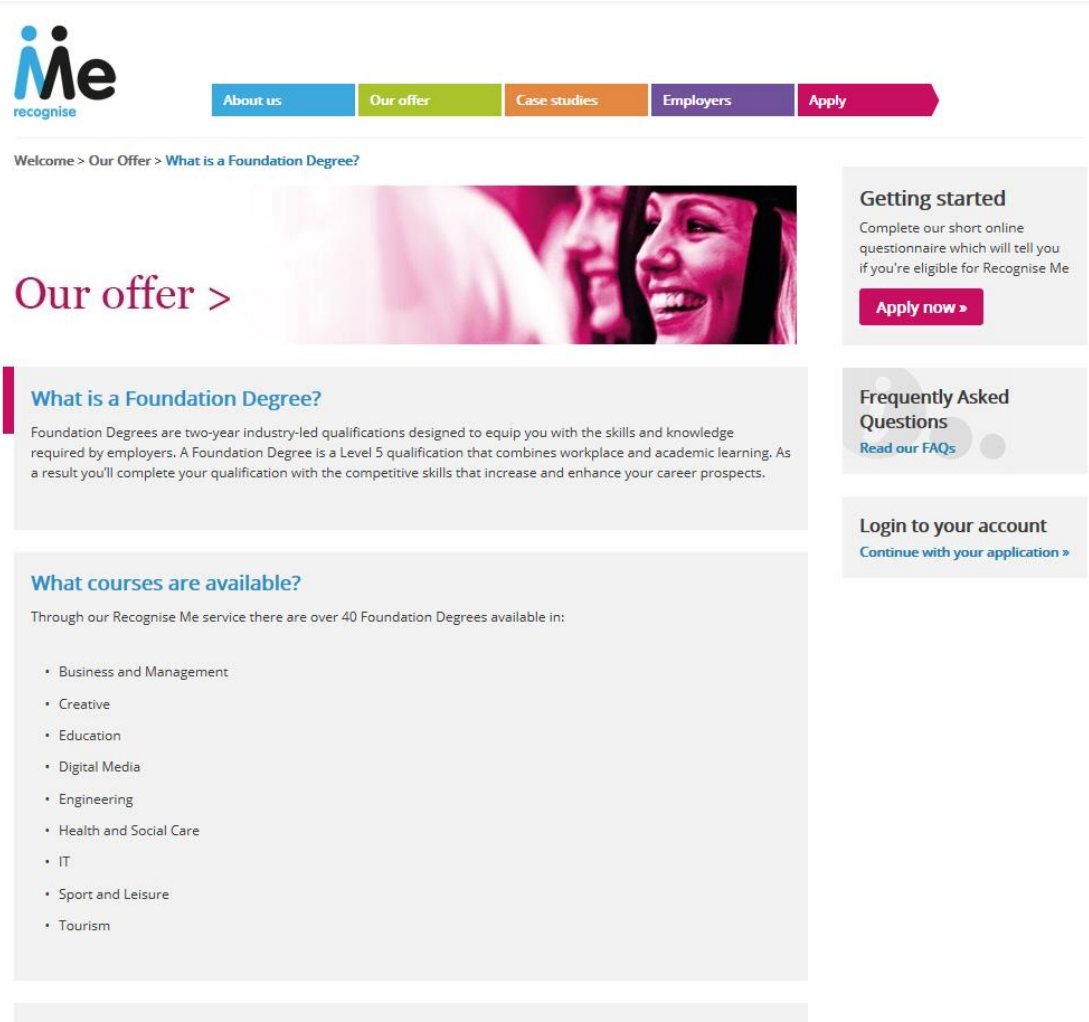
Home Page



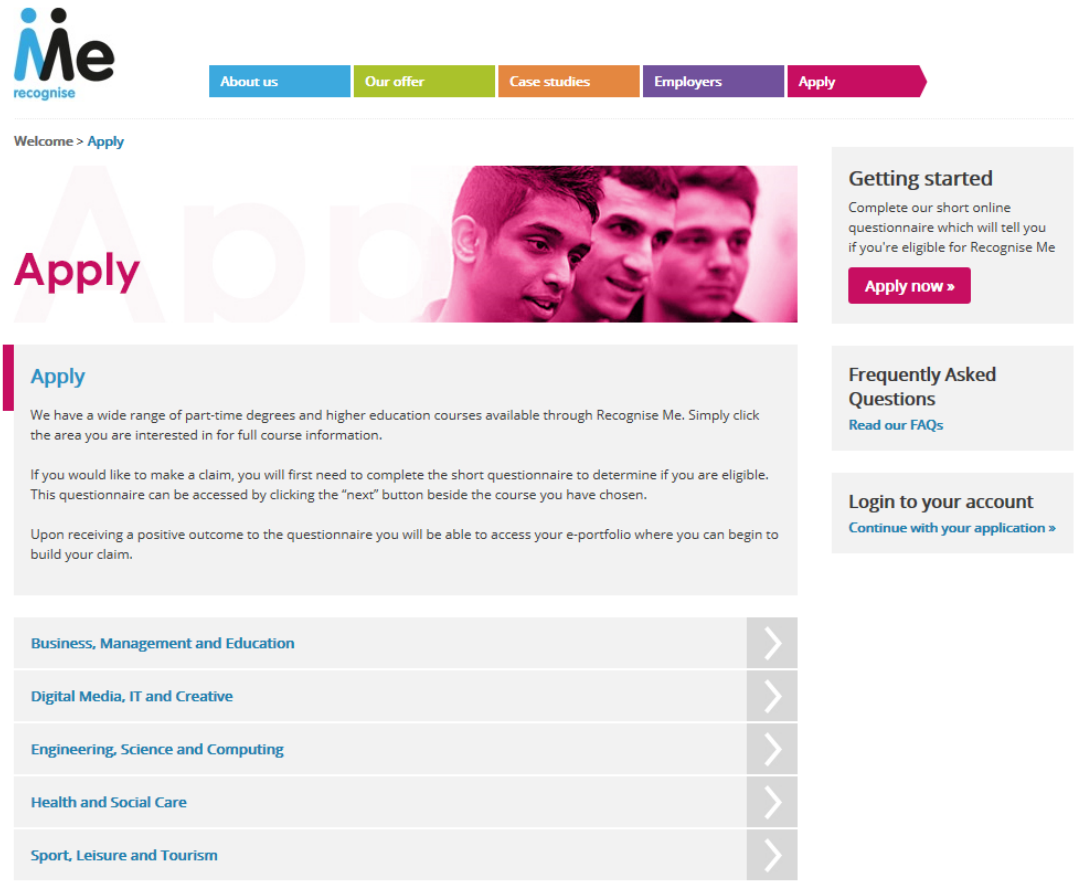
About us Page



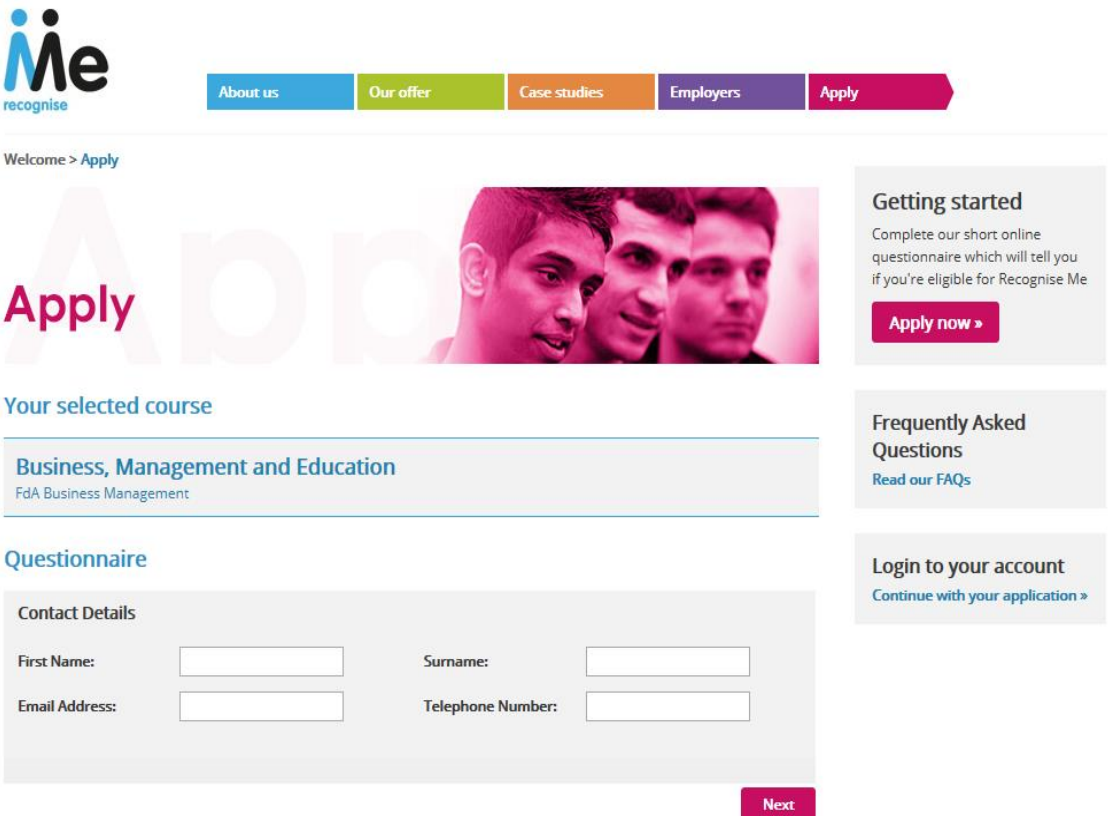
Overview of the Offer Page



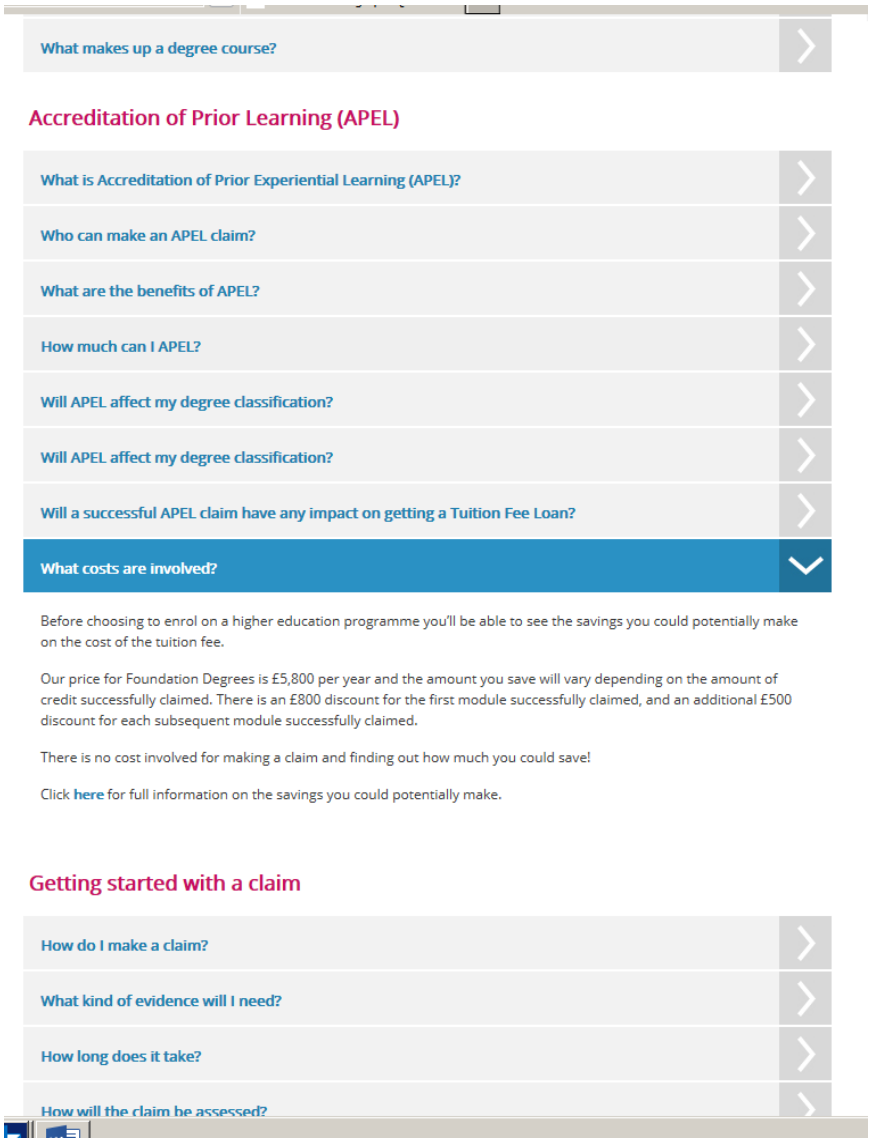
Course Selection Page



Application Page



Frequently Asked Questions Page



Appendix 7 – Screenshots of the software application

Introduction

Prior to the development of the website and software application the process for informing students within the college of the possibility of APEL was the responsibility of individual tutors on courses. This placed a lot of responsibility on tutors to ensure they remembered to identify potential students for APEL. As there was no college wide awareness system e.g. through the enrolment process, students would only find out about APEL once they had enrolled and actually started the course. A number of discussions between the individual and staff member would then be needed in order to determine whether a student possibly might have enough evidence to support a claim. Once the claim had started, the student would then collate their 'evidence' and write supporting statements to describe how they felt their evidence met the required learning outcomes for the course.

This iterative process would involve the production of a lot of paper based documentation and result in a lot of meetings between the staff member and the student to discuss the evidence and how well this (and the supporting statements) met the requirements of the learning outcomes. These meetings were often hard to arrange due to conflicting pressures on one or the other's commitments and as a result often unnecessarily lengthened the overall process.

When discussing this with staff prior to the research and during it, it was clear that many of them felt this was a time consuming and onerous process which needed to be overcome.

The software application was designed to replicate the above process but if it was to remove the bureaucratic nature of the process it would need to be capable of storing the APEL evidence and create a way in which this evidence could then be easily linked to the learning outcomes. These features were a key part of the design along with the gamification elements discussed within the main body of the research.

Student Interface

The Student Interface was design so as to make the process of building an APEL claim as easy as possible in order that students may focus more on their claim and less about the process itself.

The process starts with the student (having logged in to the system) arriving at their home screen (Figure A7.1) from which they make a choice whether to add new evidence or submit existing evidence they have already loaded within the system.

Figure A7.2 shows the student claim overview when they click the My Claim tab and Figure A7.3 shows one of the criteria sections expanded so that the student can examine the detail of a particular element.

Figure A7.4 - Figure A7.9 show the progress the student takes through the Claim Building Wizard to make the process of building a claim easier. During this process

the student identifies particular learning outcomes they believe they have the experiential evidence to meet. They link this to the specific evidence and write a statement that describes how they believe the evidence meets the learning outcome criteria.

Figure A7.2 - Figure A7.9 all show elements of gamification such as progress bars, traffic light indicators and step by step processes.

Staff interface

Figure A7.10 - Figure A7.13 show the main screens the tutor will use to assess evidence and manage their student's APEL claims.

The Home Screen provides a list of students (Figure A7.10) who are in the process of building APEL claims. When the name is in red, this indicates there is evidence awaiting their attention to assess.

On Accessing the student's record, the following screen shows the units within the programme and the student's overall progress against these. Figure A7.11.

To assess new evidence, the tutor is required to select the appropriate Learning Outcome (indicated Orange, Figure A7.12 - Figure A7.13). The screen which subsequently opens then provides the tutor with an overview of the documentary evidence which the student has uploaded in support of their claim and a supporting statement from the student explaining the reasons why they believe the evidence meets the criteria for the Learning Outcome. There may be several documents or other forms of evidence (e.g. photographs, audio files and videos) supporting the claim which are all itemised on the screen. As it is possible for one piece of evidence to meet the requirements of more than one learning outcome, the screen also displays all of the other Learning Outcomes the evidence is being linked to but supporting statements are needed for each learning outcome being claimed. So for each learning outcome being claimed, a similar screen will exist which displays the evidence being used and a separate supporting statement.

The tutor is then required to make an academic judgement on whether the evidence and the supporting statements meet the needs of the Learning Outcomes being claimed. (Figure A7.13)

There is an appropriate field to record whether the tutor accepts the claim or rejects it. In either event the tutor is then required to provide feedback to the student describing why they have decided the Learning Outcomes requirements have been achieved or not.

Once this has been entered onto the software application and 'saved', the result is immediately available to the student. Depending on the result and the feedback provided by the tutor, further discussion between student and tutor may be required. This is facilitated within the software application by means of a 'dialogue' feature which allows communication between the two parties in a similar way to email except

that it is self-contained within the software and all dialogue is retained by the software for future reference and possible audit.

In this way the software application could be considered as ‘replicating’ the paper based system as the overall process is almost identical apart from the use of a system to carry out the same tasks.

Student Home Page

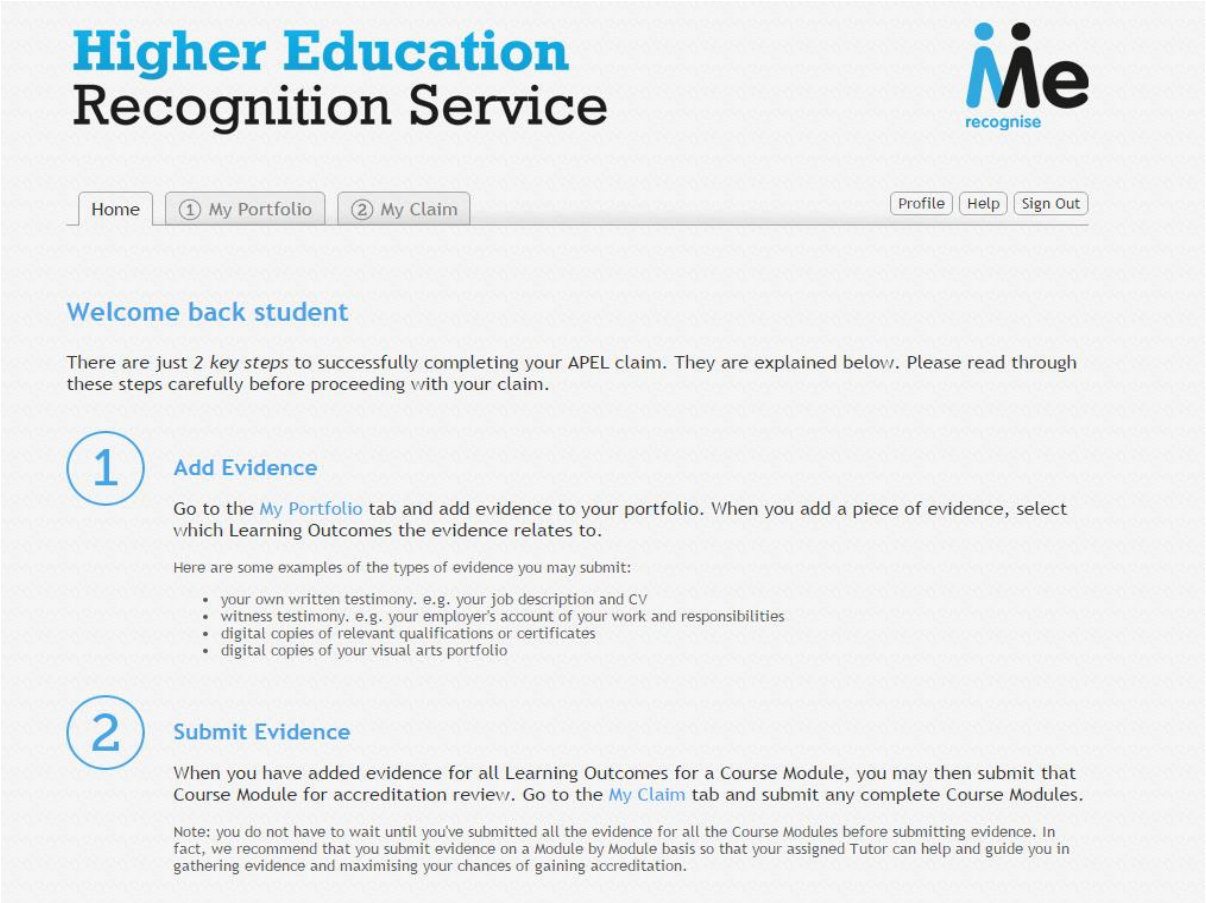


Figure A7.1

Student Claim Summary Page

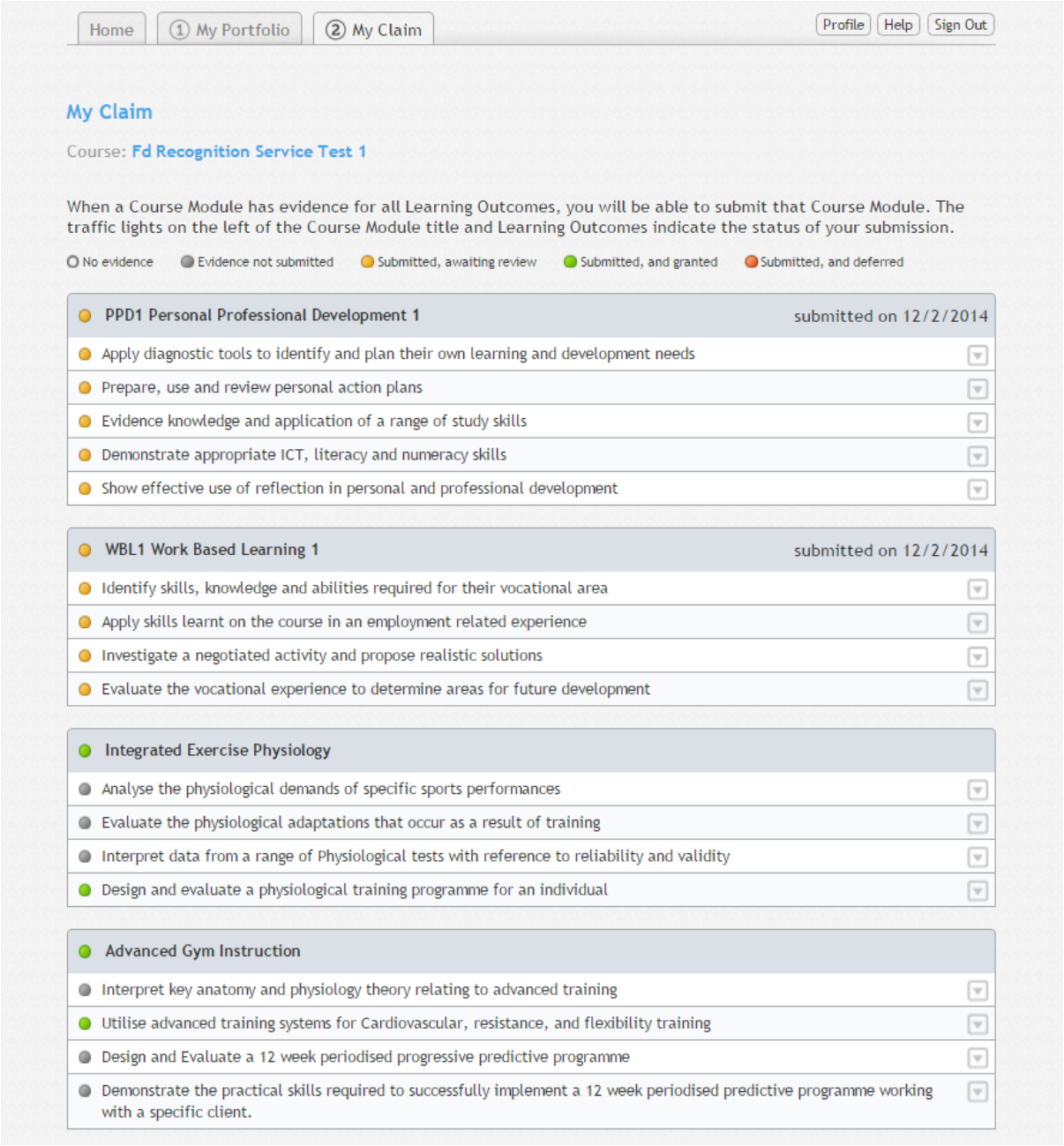


Figure A7.2

Student expanded criteria

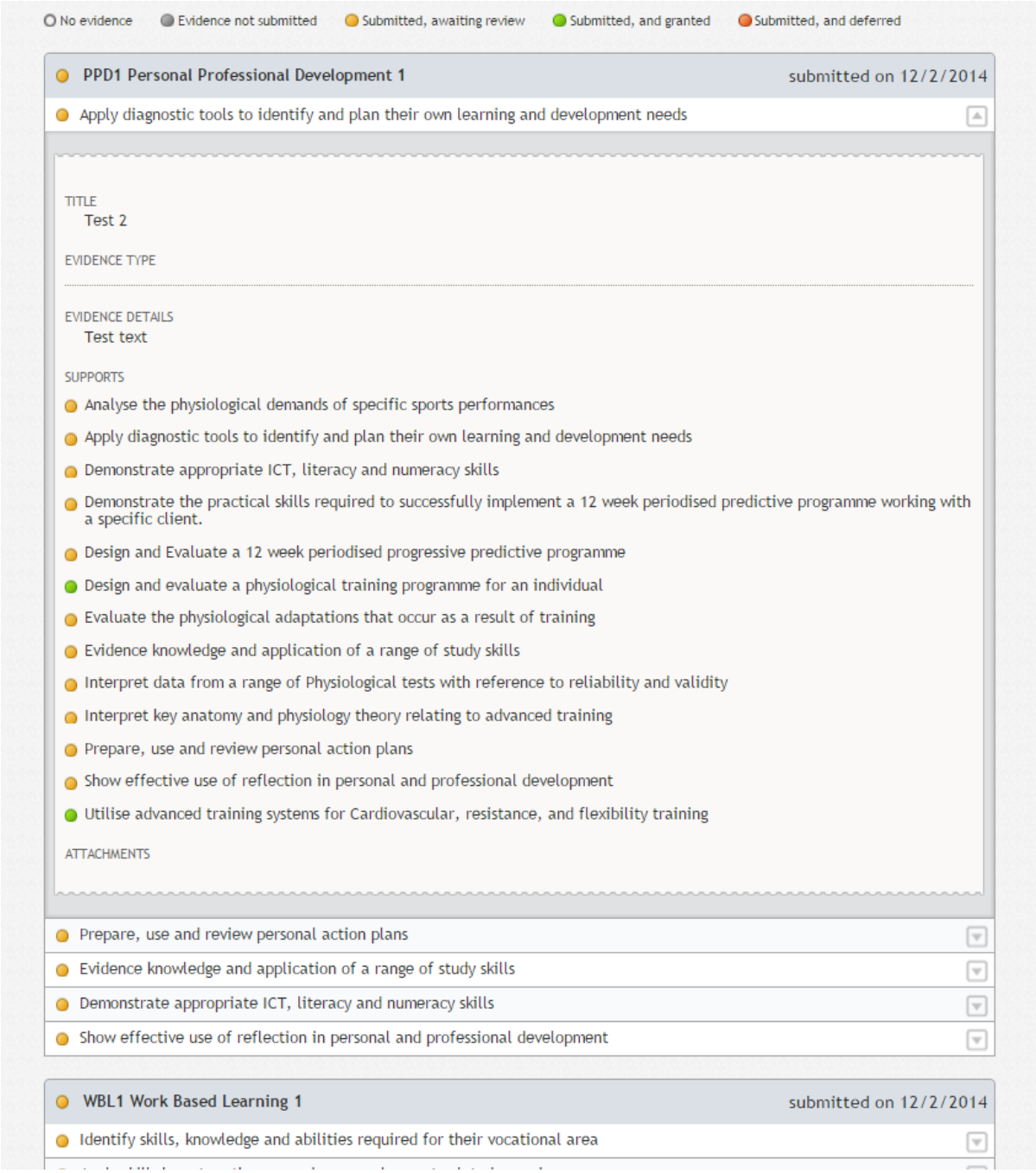


Figure A7.3

Student Claim Building Wizard

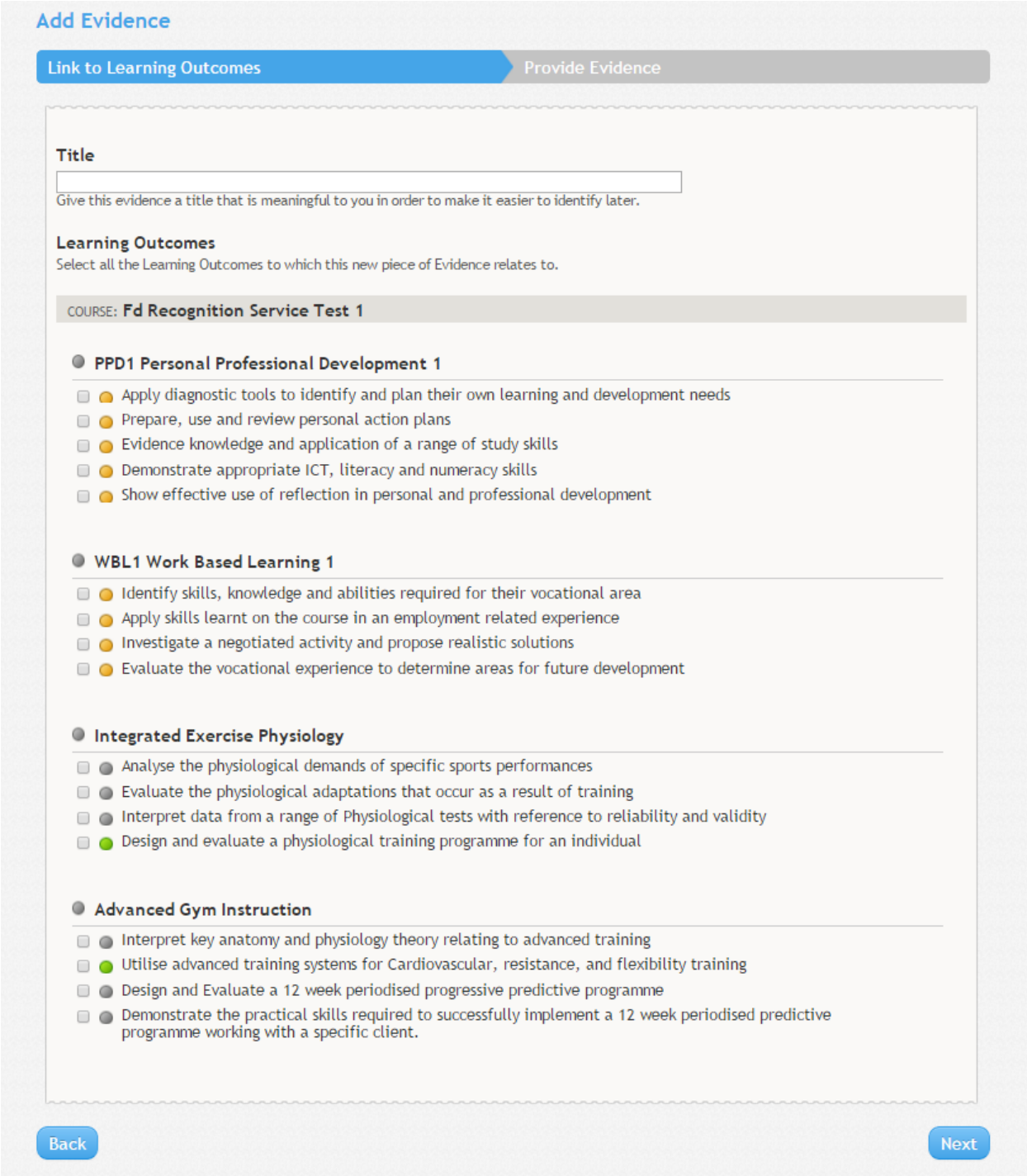


Figure A7.4

Student Claim Building Wizard – learning outcomes selections made

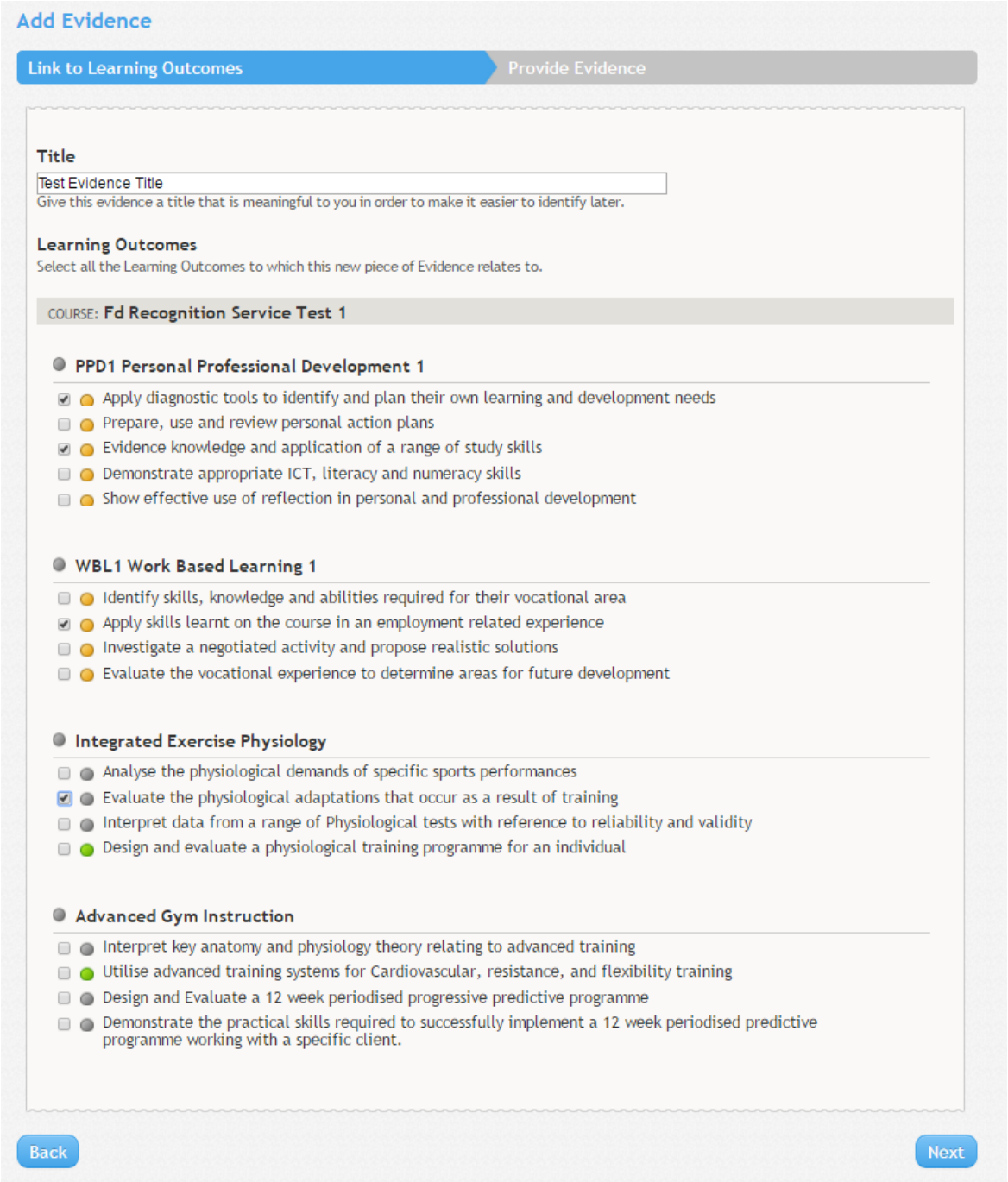


Figure A7.5

Student Claim Building Wizard – Statement of evidence and evidence type

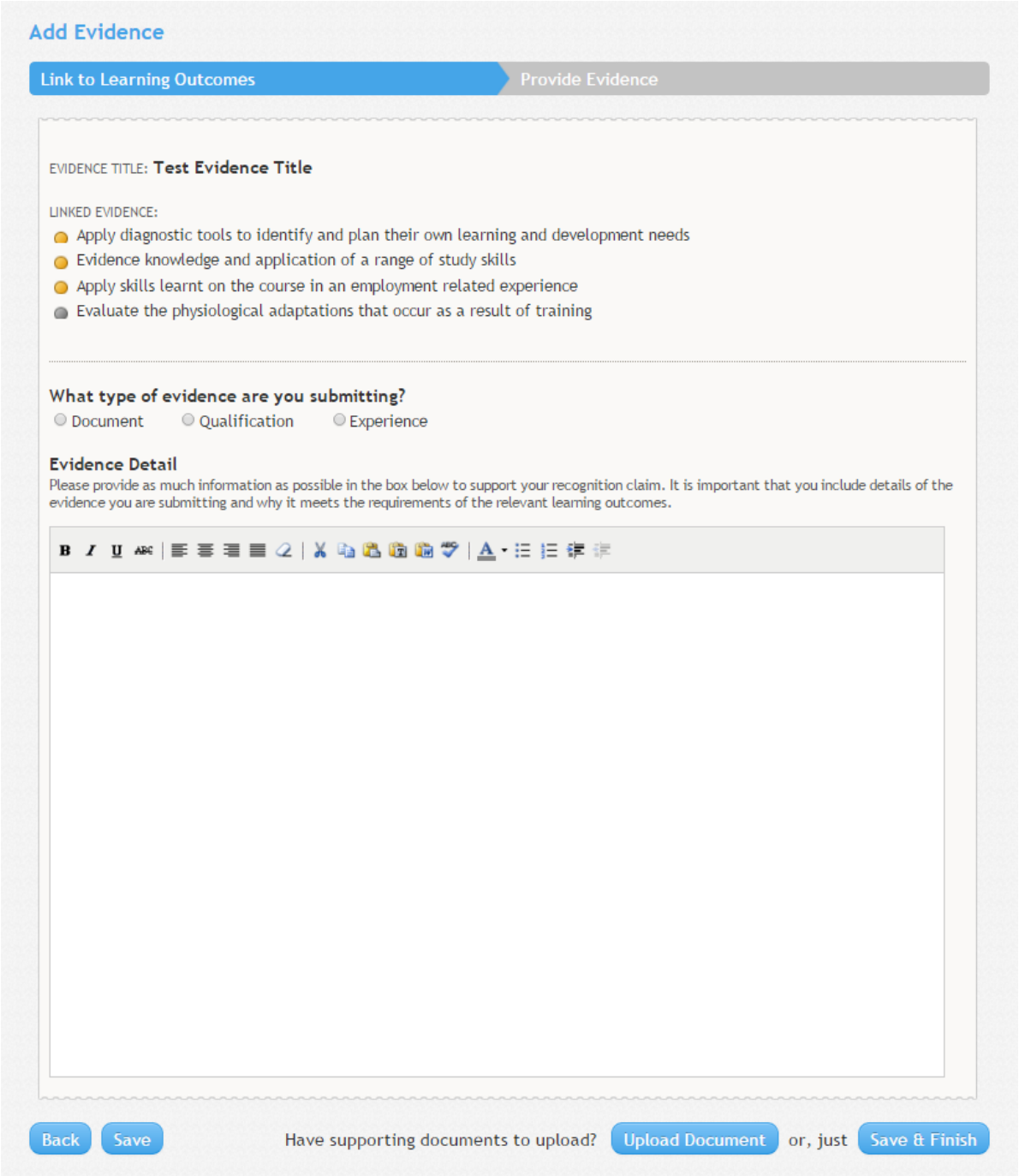


Figure A7.6

Student Claim Building Wizard – Statement of evidence and evidence type

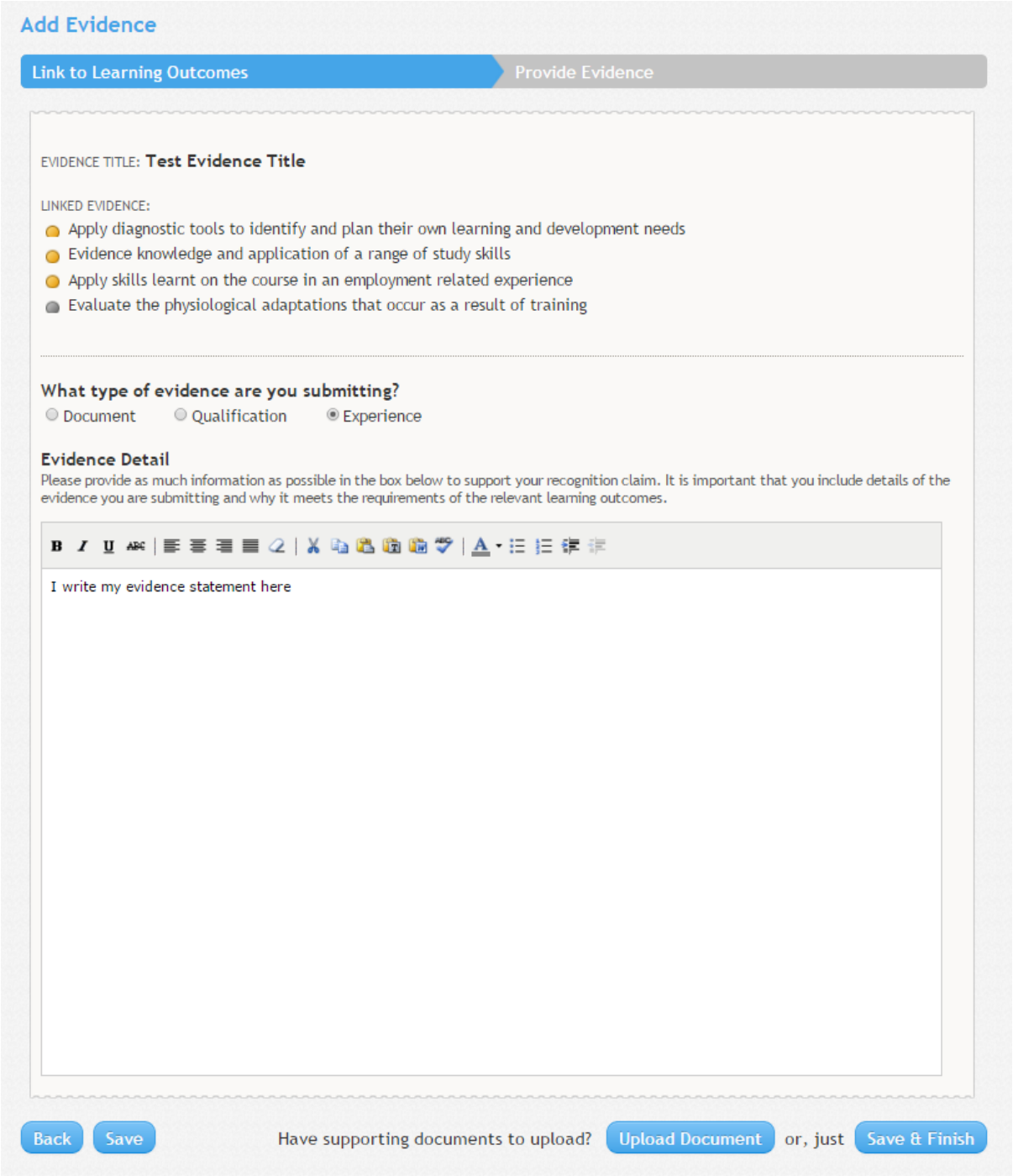


Figure A7.7

Student Claim Building Wizard – File upload

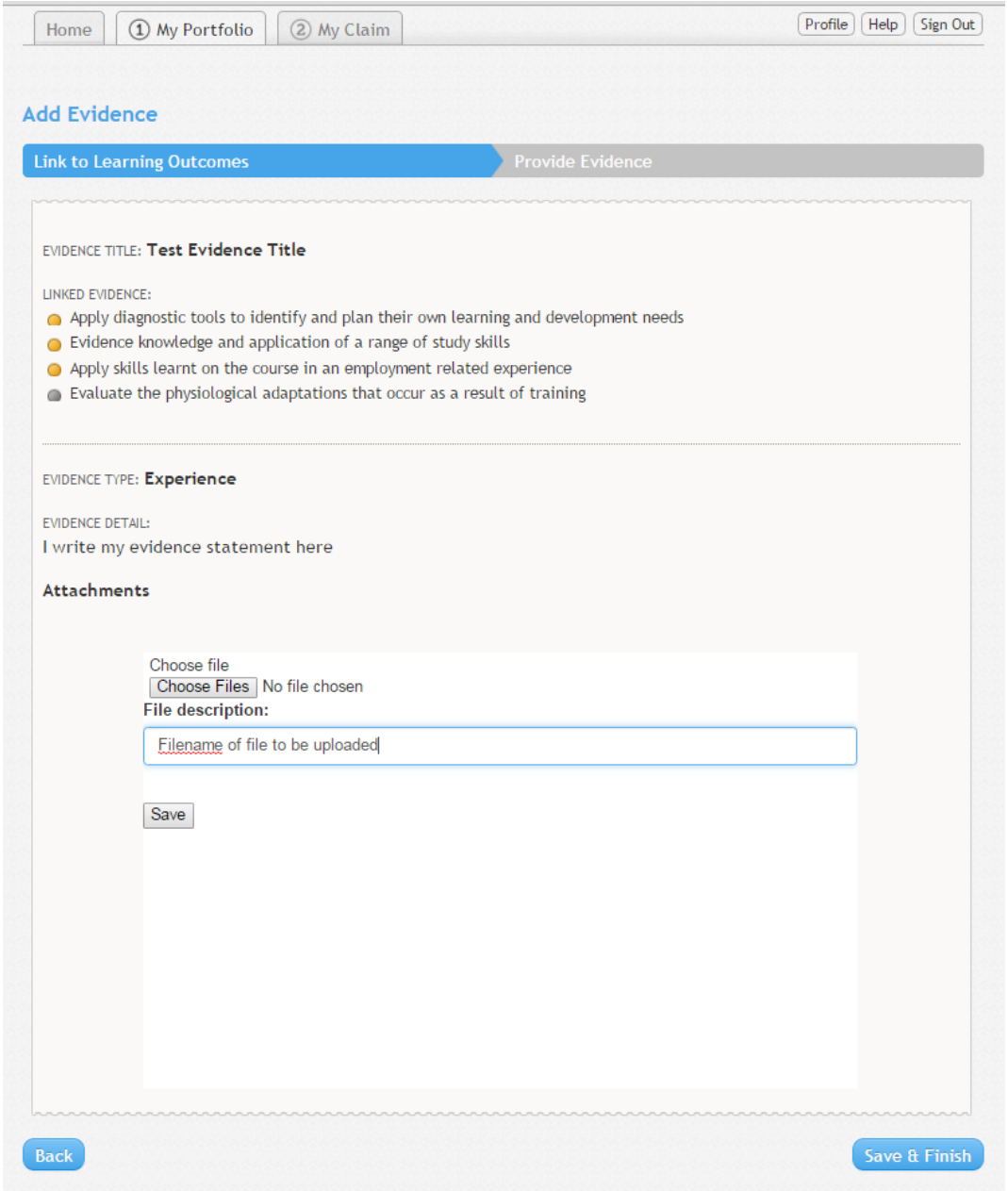


Figure A7.8

Student Claim Building Wizard – Portfolio summary with new evidence added

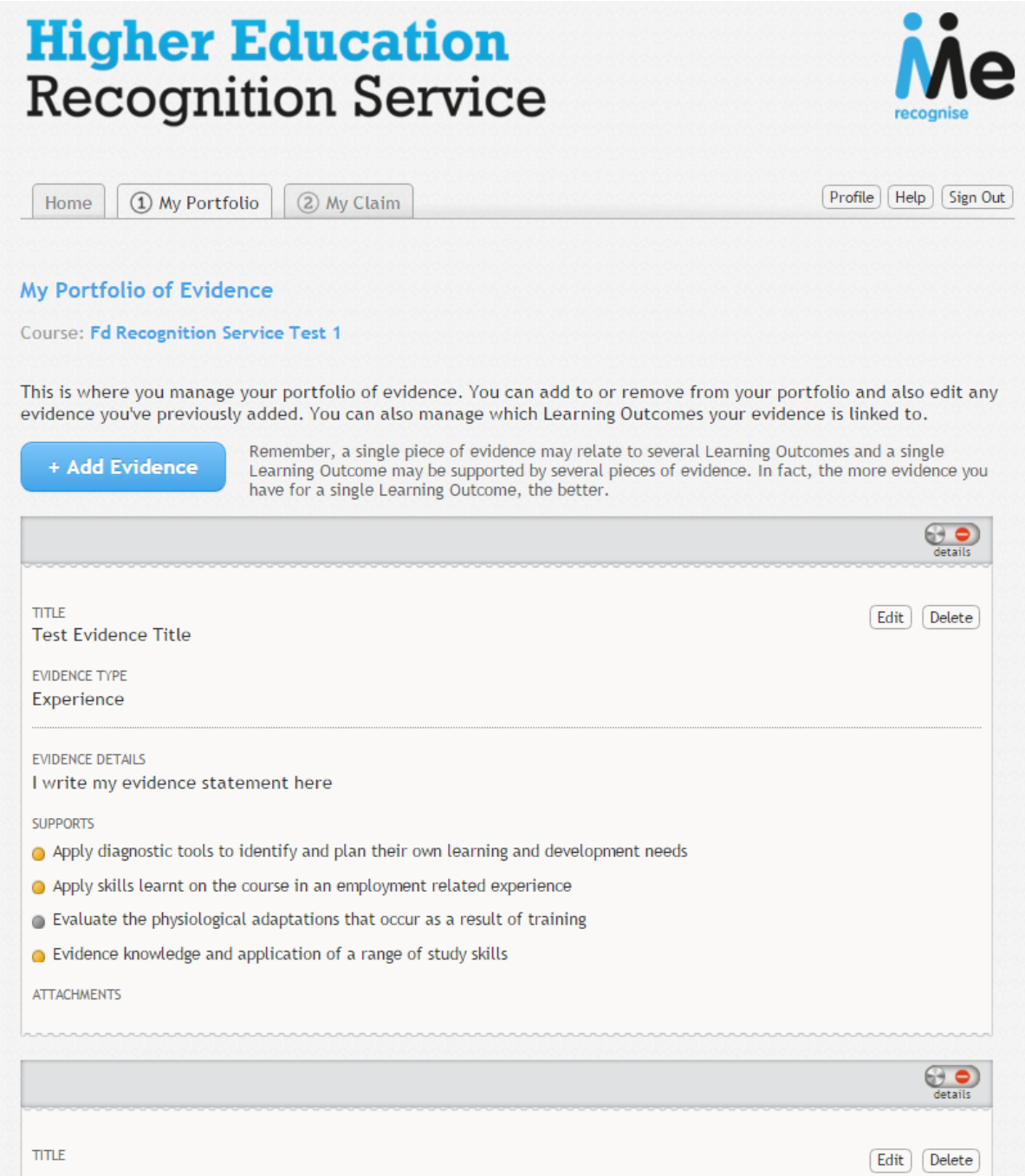


Figure A7.9

Staff View – Home Screen (Red names indicates evidence is awaiting assessment)

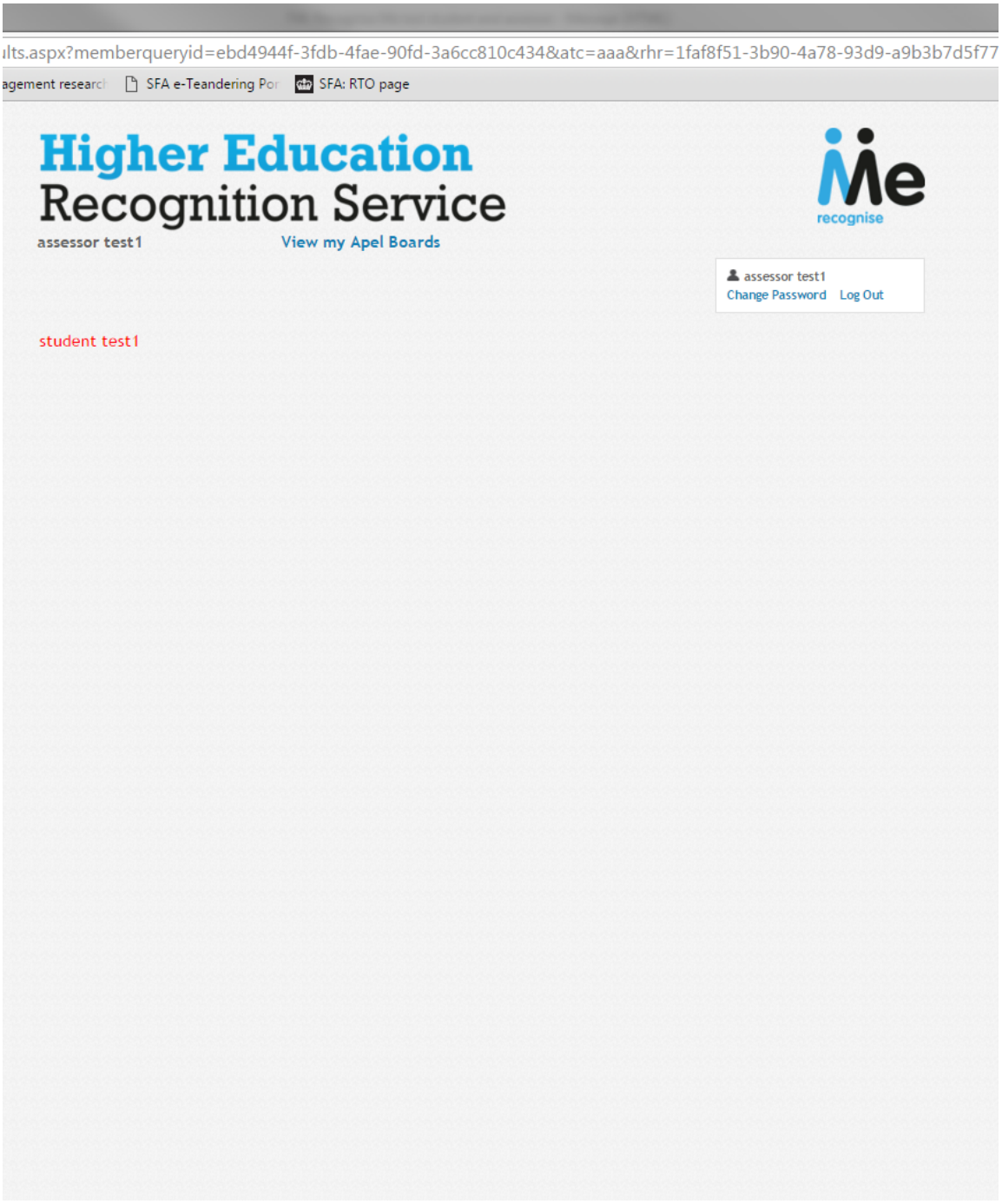


Figure A7.10

Staff View – Student Overview Screen

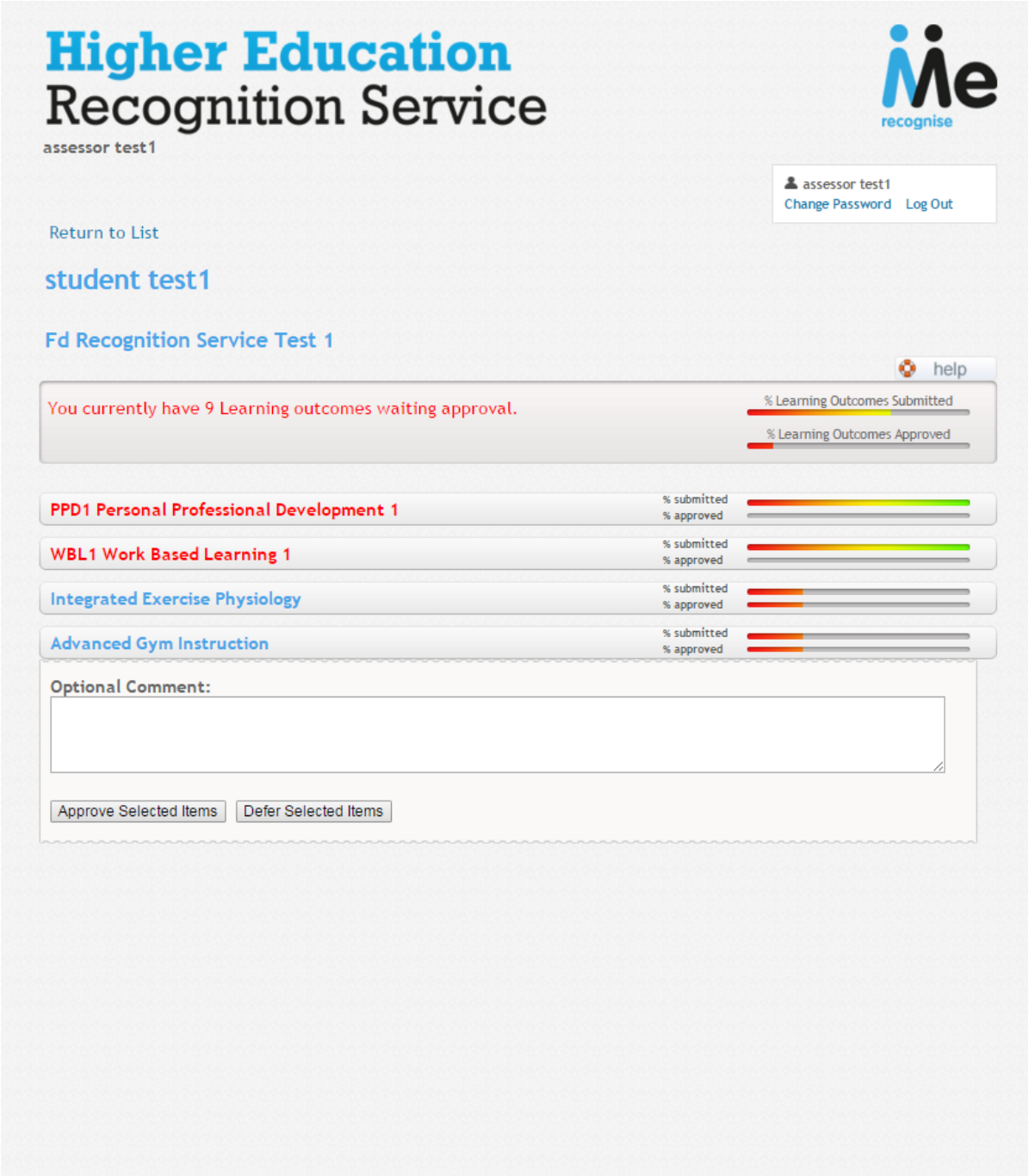


Figure A7.11

Staff View – Expanded (select learning outcomes for assessment)

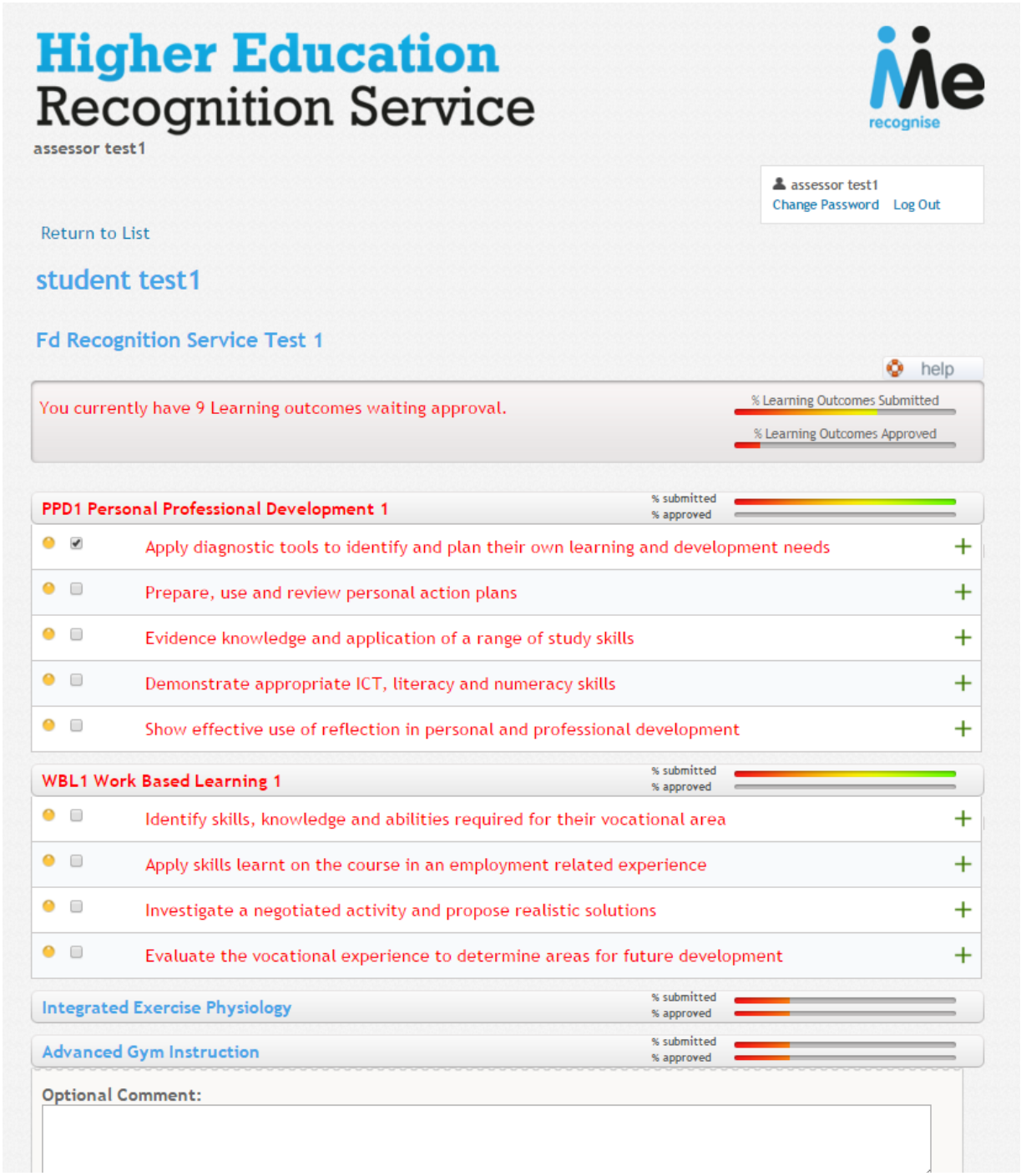


Figure A7.12

Staff View – expanded evidence view – staff can then approve or defer the evidence

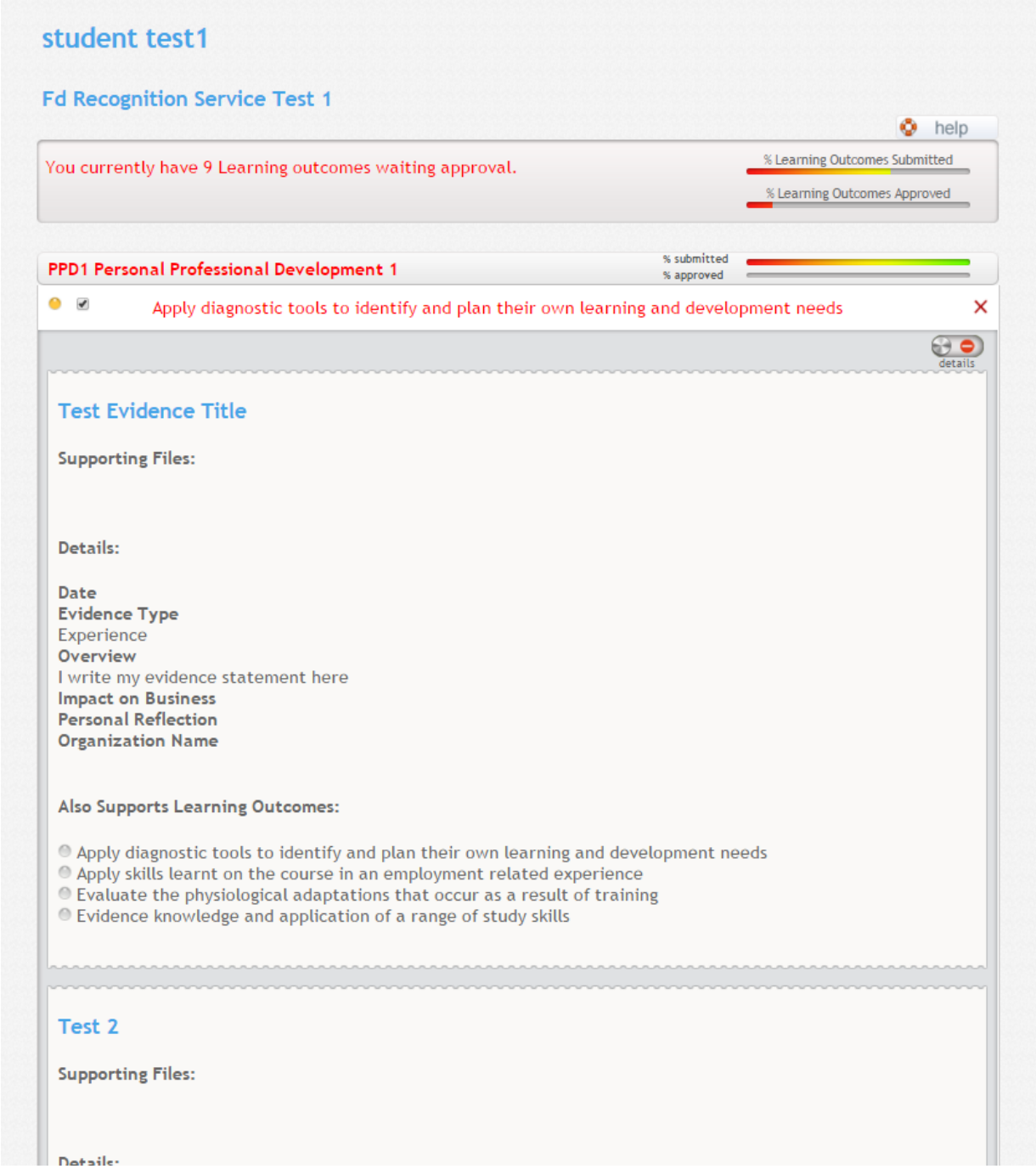


Figure A7.13